243 BOSTON STUDIES IN THE PHILOSOPHY OF SCIENCE

Analogy in Indian and Western Philosophical Thought

David B. Zilberman

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A C.I.P. Catalogue record for this book is available from the Library of Congress.

ISBN-10 1-4020-3339-7 (HB)
ISBN-10 1-4020-3340-0 (e-book)
ISBN-13 978-1-4020-3339-1 (HB)
ISBN-13 978-1-4020-3340-7 (e-book)

Published by Springer,
P.O. Box 17, 3300 AA Dordrecht, The Netherlands.

www.springer.com

Printed on acid-free paper

Printed in the Netherlands.

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EDITORIAL NOTE

Zilberman described his Hindu studies in a brief remark:

> This is not a study of Hindu Philosophies – – –
> but a methodology of how they are to be studied.

And so he introduced his profound book *The Birth of Meaning in Hindu Thought*. Now, three decades later, we have his own example, this set of his essays in exploration of the use and meanings of analogy. The texts have been assembled and translated by Helena Gourko, whose Introductory Essay carefully interweaves Zilberman's explanatory passages with her own.

....

Several paragraphs from my Note to the earlier book are still fitting:

> David Zilberman returned to Boston in the Fall of 1975, and we resumed our brief friendship . . . He came often ot our Boston Colloquium for the Philosophy of Science, quietly but passionately commenting, disputing, clarifying, instructing. Quite clearly, he was appreciated as immensely learned, intelligent and wise. And he was a splendid lecturer, at once lucid, gentle, and rigorous. I recall his thoughtful and original lecture on 'Spinoza and Marx . . . . and his masterful talk on Hindu epistemologies . . . . These were his normal qualities as teacher, tutor, correspondent, conversationalist . . . perhaps as dreamer too.
>
> He worked so beautifully and so rapidly, in English as in Russian. Not furiously but yet there was an outpouring, a flood, from a deep and powerful source within him; he had no time to let pass by, he seemed almost to be living as though he sensed there was a deadline soon. Russian, Jew, Buddhist rationalist and mystic, scientist, philosopher, humanist . . . . Zilberman was a man of our time who reached far beyond. He was a sweet genius.

(January 1988)

....

A substantial Bibliography of Zilberman's works (Russian and English) was included in *The Birth of Meaning*. A detailed Zilberman Papers Collection is located in the Howard Gotlieb Archival Research Center at Boston University. David Zilberman died July 25, 1977.

ROBERT S. COHEN

Boston University
Center for Philosophy of Science
February 2006

Helena Gourko

INTRODUCTORY ESSAY

It is always hard to be a stranger, no matter why he or she has been thrown out of his professional community, historical time, or cultural space. It appears especially painful if this stranger is condemned to alienation even after death; when his or her memory and heritage is left to the mercy of fate. David Zilberman (1938-1977), a Russian philosopher who emigrated to the United States in 1973, seems doomed to 'outsiderness' due to the circumstances of his short life. In the Soviet Union, he could not gain recognition mainly due to ideological conflicts with the regime; in America, he did not live long enough to establish himself among American philosophers. "David Zilberman has remained until now almost a total stranger to the majority of American philosophers", - wrote Ellena Michnik-Zilberman, - "partly due to the shortness of the time he lived, taught and published in the United States, partly due to his preference to expressing his philosophical thoughts in the Russian language despite his almost perfect command in English". (1) Curiously, the language barrier has now appeared to become an additional obstacle for the dissemination of Zilberman's philosophical ideas not only in the United States, but also in the ideologically transformed Russia (where his ideas have become not only permitted, at last, but also highly desired). The Zilberman Archive at the Special Collections Division of the Mugar Memorial Library at Boston University lists in its Catalogue hundreds of manuscripts, both in English and in Russian (several dozen of which are of substantial size), consisting of more than 12,000 pages. Out of all this richness, relatively few articles and one book (2) have been published. The present volume on analogy ought to mediate this regrettable situation and present to the English-language reader one of the major themes of Zilberman's philosophizing.

It seems most appropriate to introduce Zilberman to the reader, in both a professional and personal way, by using his own words. A short autobiographical statement was requested by the editor of the Russian language publication *GNOSIS* [N.Y., 1978] for inclusion with Zilberman's article "Understanding Cultural Tradition through Types of Thinking". He wrote as follows one month prior to his untimely death on July 25, 1977:

In the strict sense I do not work within a tradition because my goal is to create a new tradition by working 'inter-traditionally' or, between traditions. But I would like to mention (in chronological order) the philosophical influences to which I an especially open: Indian Vedanta, Vijnanavada Buddhism, Hegel's phenomenology, Heidegger's hermeneutics, Bakhtin's semiotics, and certainly, the modern Anglo-American philosophy of language (L.Wittgenstein).

My work in systematic Indian philosophy, consisting of investigations in logic, Indian yoga (Russian='exegeza'), and the metaphysics of ritual, exerted the most significant influence on my method. However, I do not remain within the bounds and subject-matter of Indian philosophical problems proper, but merely try to use the methods that I pick up there to better understanding of the prospects for development of Western philosophical ideas and the obstacles to such development. This work is the only attempt (known to me) where the West is explained from an Indian point of view. The way I comprehend it can be explained by the fact that I had a thorough understanding of Indian philosophies before even reading Plato. Sometimes things happen this way. So, my method, in its embryonic stage, was a procedure of 'reverse translation', or 'reverse understanding'.

My Indological studies (i.e., in Sanskrit and Indian philosophies and culture) had begun in 1962. I worked under the leadership and guidance of Academician B.L.Smirnov (now deceased) in Ashkhabad (1962-6). Boris Leonidovich Smirnov was an outstanding theosopher in the USSR [. . .]; he had a very deep understanding of mystical traditions and translated the Indian book *Mahābhārata* as well. From 1968 to 1972 I was doing my best to applying my knowledge of Asian societies and mystical and religious traditions toward the development of a general sociological and anthropological theory of tradition.

In 1972 I had some problems with the KGB because I took the liberty of publishing my paper on the Kabbala abroad [*Jews in the USSR: Jewish Samizdat*, Jerusalem, 1974, vol.6, pp.49-59]. I was told to leave Moscow immediately and was promised that I would never be able to find a position in my field. They kept the promise. I supported myself by publishing various papers under different pseudonyms [among them are several articles published in *The Great Soviet Encyclopedia*] and by translating a major part of *The Oxford Theological Dictionary* from English into Russian. The latter type of work was done for the Moscow [Orthodox] Patriarchy until October 1973, when I finally emigrated from the USSR. After settling in the United States I taught Anthropology at New York University (1974). Thereafter I taught Indian Philosophy at the University of Chicago (1975) before coming to Brandeis University in 1976, where, until the present time, I have been a Professor of Philosophy. At Brandeis I teach Hegel, Husserl, Indian Philosophy, and so on. I am 38 years old, married, and have two children.

> My main task is to create a new type of philosophizing, which is distinct from the known types. I call it 'modal metaphysics' or 'modal methodology'. The paper included in your volume (*Understanding Cultural Tradition through Types of Thinking (3)*) is one of my first exercises. Since the occasion when this paper was written I have gone far beyond it. But considering the fact that this is a completely new idea, because life is transient, and because I know I shall not be reborn again, I doubt that I shall be able to finish this undertaking. (4)

* * *

It would not be a great exaggeration to say that the central position of analogy in Zilberman's philosophizing is something unusual for Western philosophy. Although the concept of analogy is considered an important philosophical problem, it was and is still not an especially successful topic of Western philosophy (judging by the numbers of publications available). (5) Surprisingly, English-language literature on analogy in Indian philosophy is even more scant. (6) So, the purpose of Zilberman's research "is to find out why analogy, though always considered a major theme of philosophy and the only real source of epistemologically augmenting knowledge, still remains untamed and why it provokes controversial assessments in modern philosophical and scientific thought." (7)

It seems not to be accidental that analogy attracted the attention of a philosopher who developed a novel version of philosophy and philosophizing (modal methodology or, in Zilberman's awkward neologism, 'philosophology'). An explication of analogy is not just another topic of his analysis; it is closely and centrally connected to Zilberman's major philosophical investigation. Analogy unites modal methodology with tradition, another of Zilberman's interest's and thus closes the circle of modalization.

Zilberman is convinced that analogy, due to the very nature and procedure of human thinking, should be placed in the center of philosophical analysis. And yet, it is hardly recognized and almost never appreciated by philosophers. (8) The poor philosophical destiny of analogy looks even more bizarre if we compare it to the considerable role that it plays in theology, fiction, and science. (9) Poetry and theology, according to Zilberman, only partially reveal the crucial significance of analogy for human thinking, reducing it to a means either of expression (fiction), or of evidence and/or interpretation (theology). This situation may change if we turn, as Zilberman does, to Indian religion and Western science. Indian religiosity was never narrowed to the domain of only religious beliefs but, indeed, penetrated many other (if not all) spheres of human existence. Such penetration is not just an expansion of religiosity, but is a revelation of a certain universal characteristic of Indian classical culture, which presents the entire culture as a religious appearance, namely, its culture-creative potential. (10)

Indeed, the principal point of Zilberman's reasoning is culture-creative activity within Indian classical culture as performed by the six Hindu *darśanas* (*Vedanta, Mīmāṃsā, Nyāya, Vaiśeṣika, Saṃkhya̱, Yoga*), with a major cultural function of establishing, maintaining, and interpreting a meaningful structure of the Vedic Universe. (11) Such a creativity should be present within any type of philosophizing, which Zilberman views not as a reflection or investigation, but as construction: constructive analogizing with certain cultural paradigms reflected in knowledge and preserved by cultural tradition. (12)

This understanding of philosophy at work is greatly influenced by Indian studies for which Zilberman is a renowned expert. Turning to the philosophical idea of the Absolute as interpreted by the founder of the Indian classical philosophy of *Vedānta*, the great Indian philosopher Śaṅkarā, Zilberman notes (in a letter to his friend):

> An embryo of my conceptual development is in a simple thought of Śaṅkarā about a supra-mental as something real not only in its essence but also in its form. Supra-mentality of thought on the Absolute consists in that, while being thought by means of Reason, it [thought of the Absolute] becomes supra-mental not only in a certain 'ontological' sense, but precisely in the matter of this statement, just now made. That is, something, which is proclaimed essentially, should be turned to a form of what ought to be expressed now, what should be caught in it. [But how to do that -] how to cause it to vanish [this thought of the Absolute] into a non-absoluteness, how to make this very assertion of Śaṅkarā about the Absolute alive, vulnerable, suffering? How to insert this assertion into a real life, how to make it a part of human existence? And there and then a curtain was burst open and I got going amongst different philosophies in a third way, suspected by nobody else before. [. . .] What exactly am I doing by my philosophizing, how, and for what reason? It is by no means categorization from [something] alive, idealization of [something] real. Try to take it into an absolutely different, in fact, unthinkable direction. It is life itself which is weighing down on me by its diversities and non-reductions, but it is I who transfers [shifts off] its order into something different, non-thinkable [non-imaginative], who takes this life upon myself, paves it in entirely different ways. What I am doing, thus, is not an idealization, but a supra- [sur-]realization of thinking. Modal methodology is 'sur-real' with regard to life, which [life] is too ideal for philosophical activity as for making a philosophy. (13)

In this fragment, as in many other fragments, manuscripts, and letters, Zilberman attempts to clarify his major intention: a principal idea of modal methodology as a 'life-giving' philosophy.

A 'life-giving' aspiration of modal methodology is evidently prompted by an analysis of classical Indian philosophies where Zilberman follows the idea of Max Weber and others that a cultural duty of philosophy and philosophers within the Hindu civilization was to establish the so-called Vedic Universe, to be

the meaningful fabric of this culture. Zilberman's innovation is a modal approach to the interpretation of this idea, namely, his two modal reasonings: first, that there is a multitude of possible (modal) worlds worked out by Hindu philosophies and, second, that all these modal worlds exist on different levels of cultural 'sur-reality' (namely, on a level of hypothetical 'absolute ir- (non-)reality', on a level of 'apodictic reality', and on a level of deontic 'absolute reality'). Since these levels are inherent within every type of philosophizing, such a variety of modalities and modal 'sur-real' worlds also exists in philosophical texts and in what he calls the philosophical 'inter-text'; in addition, each philosophical system represents its own modal plurality.

The novelty of Zilberman's interpretation of *modalities and possible (modal) worlds* is that each of them has equal ontological rights in its 'natural non-existence' and is thus equally existent in 'sur-real' realms of philosophizing. But since 'sur-reality' itself is created within philosophical (i.e., modal) thinking, the ontological status of Zilberman's modalities becomes very peculiar: they create their own ontologies. Zilberman calls this a 'principle of ontological multiplicity' and points out that simultaneous existence of different, necessarily contradictory ontologies is the only possible way of philosophizing. Understood as different and equally existing, these philosophical ontologies become the clearest illustration of the modal approach as such. Recognizing the impossible possibility of the co-existence of different modal realms, their 'penetrability', and eternal communication, as well as insisting on their immutable multiplicity, Zilberman proposes an entirely novel interpretation of modality.

Zilberman's understanding of modality certainly differs from Aristotle's univocal treatment of modality which has its roots in the absence of any conception of alternative possible worlds; it is not a theological interpretation of modality with its foundation and thus ontological backing in a creative, supernatural God; it does not coincide with the majority of modern explications of modality directed against the classical view of the ontological foundation of modality.

Certainly close to Leibniz's theory of a plurality of modal worlds, Zilberman's conception of ontological multiplicity fortunately avoids problems which Leibniz had with metaphysical necessity, codified in the idea of the only one truth for all possible worlds. The creative essence of philosophical modalization brings Zilberman's theory closer to the Hegelian interpretation of modality. However, the principal difference between them is Zilberman's concern only with philosophical (or absolute) modalities (whereas Hegel analyzes and correlates formal, real and absolute modalities). Zilberman, thus, escapes formalization and naturalization of modality and avoids teleologization of Nature and Mind. Transfer of creativity into a realm of thinking distances Zilberman's treatment of modality from the old doctrine of the necessary plenitude of Being according to which no genuine possibility remains unrealized and where modality virtually disappears in a coincidence of necessity, possibility and contingency. Meanwhile, Zilberman's rejection of the idea of objective modality does not convert his conception into mere psychological or logical interpretation of modality (like the Kantian argument that the terms 'possibility', 'actuality' and 'necessity' refer to our subjective attitudes

toward the contents of judgments and thus contribute nothing to the content of judgment and thinking as activity, or the Husserlian logicism where modality is located in the *a priori* essential structures rather than in the phenomenological stuff of our mind and is deprived of its creative potential).

Applied to philosophy, this novel understanding of modality leads to an attempt at developing philosophical self-reflection and making “philosophy a subject of its own investigation.” (14) This apparently simple procedure becomes a crucial point of modal analysis, since, as Zilberman notes:

> the purport of [. . .] cognitive activity lies neither in Nature (let the natural science be occupied with it), nor in Mind (with a host of traditional philosophical tasks of self-cognition, of clarification of objective sources of knowledge, of implementation of ideas, etc.). Rather, it lies in philosophies themselves, when, taken cooperatively, they look like a team of strange symbolic creatures.” (15)

An attempt to make philosophy a subject of its own investigation is certainly not new for Western philosophy and Zilberman himself is perfectly aware of it. In his fragment, ‘How Does the Metaphilosophy Appear’, he analyzes three methods of Western philosophy “of making philosophy the subject for its own (analysis) - historical, typological and phenomenological.”(16) Although different, all three, according to Zilberman, “suffered the same fault: reduction. Philosophy was just replaced, or superimposed by some other object, and escaped safely.” (17) With respect to the historical method this substitute appears to be an Idea, regardless whether this Idea has been produced first and then studied, or just studied as already existent.

When philosophies are examined typologically, their qualities as a subject of investigation are usually overshadowed by psychological and temperamental characteristics of philosophers themselves (as an example Zilberman cites a philosophical concept of W.Dilthey).

Phenomenology tries to avoid psychological reduction by exemplifying the awareness of ‘doing something philosophical’. What follows is that philosophy somewhere and somehow exists rather than comes to be a subject for its own [investigation].” (18) Within phenomenological investigation, philosophy could never grasp itself as a phenomenon of (or for) its own reflection, because phenomenology “never succeeded to describe something existent which cannot be found” (19). This means, according to Zilberman, that phenomenology can never succeed in describing philosophy itself. The situation is basically the same when philosophy tries to produce its object of investigation first (instead of looking for it in different ‘searching places’) and only afterwards to situate it within a World of non-philosophical objects (or to explicate this World as a place, where this object is realized). This production of what elsewhere Zilberman calls a ‘philosophical substance’ (20) should guarantee a purity of philosophical reflection: its independence from any natural content of an objective world.

But even within the Hegelian philosophy, where a 'pure reflection' is proclaimed as the ideal of philosophizing, it has never been really achieved (21), because philosophical substance is not created there. This approach is of great interest for Zilberman because he aims to show how it becomes possible to produce 'philosophical substance'; however, to produce it differently, not through Hegelian or Platonic approaches, but in a modal way.

It is worth recalling, that Hegel's initial intention, namely, to develop philosophy as a 'pure reflection', was apparently realized within "negative dialectical logic, where synthesis is achieved by negation, so the final (form of) the Idea becomes a sum of all negations, or Nothingness." (22) But this 'purely negative synthesis' still appears to be a naturalization of philosophy; this becomes evident when the Idea descends into the World. The 'pure reflection' of 'negative synthesis' turned into the World of objects appears to be yet another philosophical reflection 'of something else', not philosophy itself (no matter, that this 'something' is somehow related to the Idea itself). "Nobody, not even Hegel himself, would declare that philosophy was the material goal of his system. It (this goal - H.G.) was the Idea."(23)

Here again philosophy plays its usual role (usual at least for Western culture) - the role of a precursor, or, as Zilberman metaphorically marks it in several letters, - the role of a compére, a master of ceremonies, of someone who announces and comments upon the performance of science, religion, art, ideology, etc. Although within Hegelian philosophy this philosophical commenting appears to be more complicated, in fact, even doubled (when philosophy first announces the performance of the Idea as such and only then implements it in various spheres of human activity), the succession remains basically the same. Philosophy, thus, is still considered to be natural, on the one hand, and acquires, on the other, a 'secondary' status in comparison with any other cultural phenomenon: any other form and type of reflection or conceptualization. This 'secondary-ness', however, is not only a matter of, so to say, philosophical 'aloofness'; according to Zilberman, the very nature of philosophy is such that if it is considered as something of less importance in comparison to what philosophy is applied to (science, religion, etc.), i.e., if philosophy is placed before this or another 'what' and only announces and comments upon it, philosophy is doomed to stagnation, obscurity and final disappearance within an applied object. As Zilberman expresses it with regard to the Hegelian philosophy: "Here philosophy is fated to freeze (to harden) in an eternal anticipation of itself." (24)

These attempts, however, were never powerful enough to separate the object and means of philosophical investigation:

> The 'gluing together' of object and means was likewise inherent in the Biblical version of Creation and in the early Hellenic gnoseology. Religious transformations and the renaissance of scientific philosophy in modern times could lead only to a certain change of accents, but not to a radical transformation of the whole cultural position. According to this

> version, a Nature itself was created, and as such it contains a project, certain regularities. That is precisely why the objects of Nature can be recorded and experience is possible. A means, after all, is necessary to comprehend this project, these regularities, more and more deeply, more systematically. A means may be directed mainly to a description[. . .], or to a discovery of things as they 'ought to be cognized' [. . .], or to a mental (valuable) activity as such - [in an attempt] to imitate not the models and results of creation, but the very act [of creation]. (25)

If so, then "where is 'a philosophical substance'? Where is the philosophy as such, a 'philosophy of philosophy' (or 'philosophy for philosophy')?" The only possible, although bizarre, answer is: "nowhere; 'philosophical substance' is naturally impossible". (26) And within this statement is hidden, due to Zilberman, 'a catch for understanding'.

> If it ['philosophical substance', 'philosophy of philosophy'] is naturally impossible, it seems to be even better: then we may try, finally, to build a 'body of philosophy', to create its organization, that organization, which reflects its own structure, assembled in a series of its [philosophy's] systematic attempts to perform what is non-performable, to accomplish the impossible. (27)

What is a subject-matter of (and for) philosophy in Zilberman's interpretation - its 'pure reflection' (i.e., reflection purified of the content of Nature and naturalness, which also includes Mind) and the results of this 'pure reflection' - is not even secondarily natural, and in this sense is definitely not the 'ideal object' of a Galilean type. That Mind can also be interpreted naturally (and, in fact, is considered as such by Western philosophy), Zilberman substantiates within his analysis of different philosophical systems (those of Plato, Aristotle, phenomenology and others). But the most instructive example for him is the Cartesian Mind, which is apparently denaturalized, deliberately purified of all the possible content of the World, owing to its ability to undertake 'radical doubt'. However, since Descartes "kept to the idea that the famous 'radical doubt' was a *natural* state of thinking without certainty, instead of presenting thinking itself as an antinomian object with *no* references or prototypes" (28), he fails to achieve a real denaturalization of Mind as well.

To go beyond this is possible only if to admit a boundlessness of thinking or, according to Zilberman, a peculiar mechanism of eternal philosophical creativity. Traces of this mechanism were reflected, among others, in the Cartesian distinction of '*Cogito*' and 'extension'. Although Hobbes showed that their radical and non-contradictory differentiation is impossible, his conclusion - that the *Cogito* is an intrinsic phenomenon of the natural world - eliminated the very mental nature of *Cogito*. Long before Descartes and Hobbes, this distinction was a matter of investigation by certain schools of Indian Buddhism, which

found a simple solution: to consider 'extension' as a mode of 'consciousness'. Drawing a conclusion from this, Zilberman points out that, first, 'extension' should be placed inside 'consciousness' and, second, that the difference between a 'consciousness unextended' (i.e., *Cogito*, and a 'consciousness extended into the world') is a difference between 'consciousness' and 'thinking'. 'Thinking', thus, is 'extended consciousness'. This very possibility for consciousness, namely, to be extended somewhere, but still not to leave its own limits is, in fact, a genuine mechanism of eternal thinking creativity. Such creativity is not rooted in naturalness and, therefore, does not need anything for its realization.

Zilberman gives a beautiful illustration in his distinction of two rays of consciousness. This distinction is based on (or rather prompted by) the Cartesian reasoning. The major difference between these two rays/types of reflected experience is in the direction of mental activity as described by Zilberman through metaphors of a ray 'coming out' of consciousness (as in the case of scientific experience), and a ray 'coming into' consciousness (when religious reflection is considered). (29) Being directed outside consciousness, experience hopes to capture external, natural things and to bring them, or their named images, back. When the cognitive ray turns inside consciousness, it means basically two things: that it is not preoccupied with what is going on outside consciousness, and that all the activities of cognition remain primarily (and, in fact, only) inside the sphere of consciousness. Although quite close to each other, these things are not identical. The first consequence of the 'rolling up' is an urgent necessity to restrain thinking from its involvement in a 'natural world'. Zilberman formulates this necessity as a peculiar philosophical metaphysics, which results in overcoming a physics of natural-ness and a physics of language. Zilberman can facilitate this reasoning with his distinction of 'consciousness plain' and 'consciousness extended into the world' (or thinking). The second consequence of the 'rolling up' is directly linked to analogy (since what is meant here is a specific development of thinking through the mechanism of constant and intense self-reference). Here we have what Zilberman calls the general image of knowledge-construction: reverberating from different levels of consciousness and meeting within this reflection, neither a correlate (as required by a normal reflective experience), nor a linguistic denominator, the ray remains within a conscious sphere and generates knowledge from the material which is available there and in a way which appears to be the only one possible: as auto-reflection, analogizing with its own, previously-accumulated content.

What has to be surpassed by philosophy, when its personification in 'physics' (or the 'physical reality') of language is concerned, is a natural-ness of words; Nature turned into words; a natural essence of the word; the attachment of a word to the world; a claim that a word is a mirror of the world as a result of naming things of the world; the aspiration to interpret a word as a mediator of presence within Nature's existence; and an intention to understand a word as an integral part of the existence of the natural world. It does not mean, however, that a word has to be surpassed as such; on the contrary, within the Vedic

cultural Absolute, a word (through the *Veda*) becomes a foundation and a mediator of the Absolute. But this word is purified of its natural connotations and is used in its highly speculative, abstract, non-natural reincarnation. (30) Such a word harbors no intention of reflecting on the natural world; it is culturally organized, i.e., linked to a specific kind of knowledge.

This conjunction may not be visible within some languages; in fact, in those, which became the foundation of our civilization, Greek and Latin, it is hidden in the most decisive manner (see *Upadeśa-Sahaśri*, in this volume). However, in Sanskrit this message is quite apparent (Zilberman characterizes it as the index issued by knowledge) and reveals that amazing cultural situation wherein language is transformed into a mediator of the constructive activity of thinking. What can be seen through this language is a non-linguistic (and non-natural) world of logic, proof, sanctification, construction; a pure spatial placement, with knowledge stowed in its center.

> Like in a sentence: "I know . . ." which demands objectivization of 'what'. Precisely this 'what' is placed as an index emanated from knowledge, an index which modalizes what is known into something that has [is obliged] to be arranged [constructed], placed here and there. (31)

This interpretation of language is so unusual that Zilberman calls *it non-linguistic: words are utilized not in a function they apparently were created for; namely, the function of signification*. Replacement of signification by construction, however, is not that drastic a change if we consider that words in Indian classical philosophy (first of all, in *Vedanta*) do not signify individual things; i.e., do not *describe*; rather, words there relate to *universalias*, universal concepts and, thus, are intended to *explain*. Zilberman calls such understanding a 'linguistic deconstruction' or 'semantic destruction of language'. (32)

Such an understanding is hard to grasp by the Western mentality for which an impact of language upon consciousness, because of certain cultural universals, predominantly reinforces its signification activity. However, this is precisely the case for Indian culture where language predominantly stimulates a symbolic activity of consciousness. Still, Zilberman argues, a symbolic activity is inherent to any utilization of language by consciousness, within any culture. Analyzing this two-sided phenomenon (placement of language within mind and incarnation of thinking in language) in his unfinished fragment on the *Antareya-Upaniṣad*, Zilberman notes:

> If the Biblical God would receive an assignment to memorize the *Veda*, to learn it by heart by knocking it into His memory and mind, He will hardly act differently than creating God-Son-Word. What is God the Creator doing, as a matter of fact? He thinks that He creates but He only looks for and finds means of incarnation of the words of the *Veda*. (33)

The theory of creating a world by a word is based on interpretation of a word as:

> not a material, but instrumental reason [of creation] [. . .] The *Veda* was presented to the Creator in order to cognize forms of things through their names, to correlate a project with a result of creation, and thus to reproduce this world. For Him, therefore, the *Veda* is not a design but a project. The word is utilized as a denoting term which, while taken as an ontological image, can be regarded as world-generating. (34)

Zilberman's interpretation of language as a sequence of manipulative procedures of thinking about consciousness becomes much clearer with this last remark, the more so if we remind ourselves of what Zilberman writes about the Vedic Universe of Indian culture. An incarnation of Vedic words within (and as) Indian classical culture results in creating just such a cultural world where language loses its descriptive aspirations, and words become a means for revealing a constructive essence of thinking hidden behind this Universe. Quite early in his analysis, already in his 'History of Indian Logic' written in Moscow in 1971, Zilberman sketches this construction (noting that, for Indians, objects first appear in language; more correctly, thinking-constructions of these objects receive their external expression in language). Indian philosophical thinking does not either reflect upon Nature, or describe such reflections in language; it constructs cognitive objects, externalizes them by a means of language, and implants them into a cultural world. (35) Including philosophy itself into such a process (see, a 'mirror-strategy', in this Introduction) further developed this understanding. Although Zilberman does not clarify this passage any further, it becomes clear from his later works that all these steps are analogical. They represent different types of analogy and presuppose even more of them precisely because they are based on the constructive activity of thinking solely responsible for generating philosophical knowledge.

In the same text Zilberman considers certain absolute, non-empirical components defined by him as structures of knowledge. Structures of knowledge are transcendental with respect to a natural experience (because they originate from a social interaction of individuals within a group which Zilberman calls a pure structuralized activity, or a symbolic modeling). What Zilberman is here concerned with is the formation of the subject/possessor of thinking. He intends to prove that the formation of a thinking subject, at least within ancient Indian culture, occurs in "a certain process of creating a structure of activity intended to master objects of the outer world which cannot be 'mastered, reinvented by thought' otherwise than within this activity as existent in[side] consciousness." (36) Such 're-invention' demands a joint activity of everyone involved in the social interaction within a group (since individual efforts, even those of the most talented and capable members of the group are not sufficient for mastering the outer world). This process can be described in an opposite direction, when failed

attempts of isolated individuals to survive within a hostile environment of the outer world are taken into consideration. Interaction between individuals demands a mediation between all members of a group; such a mediation is guaranteed by the ability of thinking shared by all communicating participants.

That thinking is a group phenomenon is quite evident in the Indian case, although not clear when applied to the Western mentality. In fact, it is better to use a neutral term such as 'cognizer' instead of a 'cognizing person' because of one serious consequence of surpassing a physics of natural-ness and a physics of language; namely, a cancellation of a 'subject-object division' in cognitive processes. Thinking is not meant to be individual; rather, it is a 'dividual' thinking as a joint activity and a collective enterprise of everybody involved. A scope of involvement is determined by a style of thinking that dominates within a culture, or, as Zilberman phrases it in a roundabout way, any historically-existent culture is framed by boundaries of its effective communications. [37] Interestingly enough, a 'subject-predicate division' within Indian classical philosophies can only exist as a peculiar result of the entire cognitive process, with a predicate finally created, or separated from the cognizer.

> In India, a 'subject-predicate situation' can never be the initial point; in the last resort, it turns out to be the final result of analysis. That is, a logical procedure has to reflect and fix a process of a gradual separation by the 'subjectified' actor of an 'objectified' predicate from himself. Precisely here is the entire, most interesting and enormous difference. Precisely here lies a clue for understanding such diverse development of these two [Western and Indian - H.G.] traditions. (38)

Zilberman links the very appearance of invariants of thinking to certain analogous situations in different spheres of human activity:

> Because thinking itself exists within a system of actions, analogous situations can appear at different stages of development of civilization, culture, and human activity, and precisely these situations generate, as a matter of fact, the same functional positions for different mental identifications. (39)

Thus, analogy is mentioned by Zilberman for the first time when placed at the very beginning of the entire process of philosophical thinking (though not yet immediately connected to philosophizing). This kind of analogy opens a chain of analogizing, with its major links described by Zilberman as follows:

> Analogy can be [. . .] interpreted as a 'seed' (*vāsanā*), an intra-structural unit of the specifically Indian tradition of learning, cognate to some basic principles of Indian social organization (e.g., the 'dividual' subject as the philosophical principle of the 'caste consciousness'). It can also be presented as a 'genetic code' of the basic types of Indian philosophy and,

consequently, as an important means of interpretation of all [entire] Indian culture. (40)

Later in this unfinished text Zilberman refers to two major types (or understandings) of analogy: (1) as related to thinking as a capacity of individuals, and (2) as taken in its universal dimension, when the entire domain of philosophizing is concerned. By way of initial approximation it seems reasonable to divide the first type into two subtypes: 'individual analogizing' with universal structures of knowledge (through logic as a formal projection of thinking) and 'individual analogizing' with a cultural tradition (through expert knowledge as a content projection of thinking). Both subtypes of 'individual analogizing', as we will see later, are reflected in a structure of a particular deduction by analogy, *upamāna*. (41) When 'universal analogizing' is concerned, certain formal and content projections can be discovered there as well (although with a different interpretation). Formal projection can be reflected through the so-called 'mirror-strategy' (42); content projection can be grasped through the peculiar combinations of three major subject matters of Indian classical philosophies (Word, Thought, and Action), different with respect to each of the *darśanas*. (43)

Zilberman presupposes that philosophy has to deal with analogy constantly and on a regular basis, as long as philosophy is interested in thinking. Indeed, "the entire realm of philosophical literature is based almost exclusively on analogies, examples, 'paradigms' and incomplete inductions (which resemble analogy very much)" (44) Zilberman claims that "almost all of what is substantial in philosophical reasoning is woven by various analogies and similes." (45)

Analogy springs from the very form of individual existence within a group (and within society if we interpret it as the ultimate group). It is interesting to trace, in this respect, Zilberman's explanation of why it becomes so difficult to determine what type is represented by the Aristotelian categories, linguistic or logical, and why a syllogistic model of reasoning was accepted there and then. His answer is quite unusual: he overturns a familiar sequence and proves that people in ancient Greece thought by means of syllogisms not in a certain objective sense, but because Aristotle says so, or, rather, because they agreed with Aristotle to utilize a syllogistic model of reasoning. This is what Zilberman calls a 'culture-organizing function' of thinking. Thinking therefore does not merely reflect (or, maybe does not reflect at all), but organizes different cultural realms by means of its invariants, in order to diminish a chaotic state. These invariants (and thinking as such), thus, perform not just a normative, but a norm-setting function. Owing to this norm-setting activity, invariants of thinking are carried outside, and thus transform into forms of behavior and symbols of culture.

This transformation becomes more transparent in Zilberman's analysis of the analogical nature of ancient Indian thinking. The interpretation of analogical thinking as a mark of ancient Indian consciousness (and of conscious activity as such) is based on the assumption that analogy has been gradually developed

from imitation. Such imitation, however, is understood in a peculiar reverse way (if we take as a straight pathway the habitual interpretation of following Nature and naturalness). Not Nature, but invariants of thinking become an object of (and pattern for) imitation (or, as Zilberman formulates this idea in 'Revelation of Mechanism of Tradition in a Form of Grammatical Paradigms of Indian Logic', "rules of a social-cultural mechanism of human activity" represent the major pattern of human behavior and conceptualization). It is precisely these invariants that penetrate the entire universe, including Nature.

Quite an amazing illustration of this reverse imitation is given in an unfinished and untitled fragment on *jāti* (or on what Zilberman calls elsewhere a 'false analogy'). The reader should not be misled by this adjective, since *jāti* is still considered by Zilberman to be analogy, and although not a formal one, as a genuine analogy (i.e., as the one based on a formal similarity), but as a content analogy (see *Jāti* in this book, Chapter 'Analogy in *Navya-Nyāya*'). Sometimes Zilberman calls *jati* a homology, a notion that he also uses to describe a relationship between Indian classical philosophies. We will try to show later this homology in Zilberman's interpretation of *darśanas* is utilized in its analogical connotation as a peculiar content analogy.

This and another fragment on *jāti* provide us with an explanation of how this reverse imitation works, and in what manner notions of *jāti* and caste are approached. " *'Genre'* - *Jāti* - in Sanskrit is a semantically undivided binary of being as a present-at-hand result of activity, and process as a production or a generation of being present-at-hand." (46) This generation, however, has no resemblance with a real material production; it belongs to a conscious generation, the most vivid result of which is a social caste. Although *jāti* as a caste later becomes 'secondarily-naturalized' in a social structure, still it is unnatural, as well as not quite social. This embodiment in a social caste is not the entire process of a transposition of *jāti*, for it goes much further and leads to a classification of everything, i.e., of "Nature, ideas, Gods, in terms of caste relations". (47)

Nature, thus, turns out to be completely socialized, a caste society itself becomes entirely organized, and human existence there appears to be totally penetrated by a network of correspondences between a production of material resources, social relations, and structures of consciousness. These correspondences determine perception of everything. When translated into the philosophical language of Western culture, these correspondences, according to Zilberman, look as strange as an attempt to identify the Aristotelian 'categories' (as supreme genres of a natural being) with 'classes' in Plato's *Republic* (as supreme genres of a social being. (48) Such identification, nevertheless, should not be perceived as odd by classical Indian thinking, for which "categories always exist as genres of a completely socialized activity, as real intersubjective human relations." (49) This is even more so if we take into account that "Nature is also completely socialized." (50) Zilberman accompanies this remark with a very significant note that, although socialized, "Nature is not rejected by any means: instead of Nature as such we have *maya*, an artificial creative activity

naturalized in a subject of this activity, i.e., an individual]. *Māyā* is a Nature of an activity of consciousness [. . .].” (51)

Historically first, and the most important form of a socialized activity in any ancient society (including the Indian one), is ritual, a pure structuralized activity grasped in its symbolic form. When Zilberman turns to the so-called ‘inflation of thinking’ (as the second stage in the creation of the mechanism of analogizing) as a necessity for thinking “to exceed its own bounds, i.e., to transfer all the totality of properties ascribed [to itself] as immediate symbolic representations onto exterior objects”, he states that this

> exit from itself (‘by analogy’, as an analogical one) means an establishment of particular correlations between cosmic patterns and concrete cases of behavior. It implies the necessity of analysis and the verification of an achieved correlation, and thus a mediator (a model of the second rank), as well as efforts of methodological consciousness, becomes necessary. A model which liberated [. . .] thinking from the necessity to be monosemantically attached to certain cosmic patterns of identification, and which thus purified it for analysis [indeed exclusively for analysis], appeared to be the *Veda*. (52)

There are many interpretations of the *Veda* in Zilberman’s texts but one of them is mentioned more often than others, namely that the *Veda* is a living tradition. This seems to be a very peculiar interpretation of tradition if we recall Zilberman’s remark that in India “a unanimously monosemantic correspondence is preserved between thinking, world, and the *Veda*.” (53) There is another statement asserting that the *Veda* is undefinable as a text. This ‘textual construction’ is much more than just a text. According to Zilberman, the *Veda* can be approached in three different ways: as language, thinking, and activity. (54) The text just cited contains a deep and all-embracing analysis of the *Veda* (and we refer the reader to it if he intends to harmonize pieces of the Vedic ‘puzzle’). For the purposes of analogy exploration, however, it is sufficient to emphasize that the *Veda*, first, is a living tradition and, as such, accumulates all important and indispensable cultural paradigms; second, that the *Veda* itself serves as a peculiar double analogy (of world and thinking); and, third, that the *Veda* is surrounded, or maintained, by the ceaseless thinking activity of professional philosophers: Brahmans. Interpreted in such a way, the *Veda* reflects those characteristics of philosophy which remain a mystery in Western culture, namely, that philosophy gains an access to primordial cultural paradigms; that this access is mediated by a cultural tradition manifested in the *Veda* (or a similar symbolic mechanism); and that the major function of philosophy is to transpose paradigms (or tradition itself), through thinking, into all spheres of human activity (or, similarly, to check and correct this activity in accordance with these ‘fundamental invariants of social being’).

Although this interpretation is quite vague, it helps to sketch a certain preliminary portrait of philosophical analogy. Analogy can be perceived as an

instrument for correlating those mental identifications, which represent the results of human activity in different spheres, with universal paradigms of cultural existence, preserved within tradition. It is important to note that this instrument itself is created (and constantly re-created) as a result of a peculiar analogizing of philosophy with its own content, as well as with its cultural implementation. Basically, everything that philosophy performs as its constructive activity should be based exclusively on analogy and analogizing.

Different 'actors', however, can undertake this activity, and here we return to the differentiation of 'individual' and 'universal' types of analogizing. With regard to these types of analogy, it is important to trace a distinction, or, rather, a complicated correlation between philosophy and logic. A confusion can happen quite easily here since the title of this book reflects analogy in philosophy as the major topic of analysis, while it is precisely logic that often seems to occupy the principal position in Zilberman's explication. It might lead, in fact, not only to confusion, but to a replacement of the very field of analysis; i.e., one might turn to interpretations of analogy which are habitual for Western mentality, and which place it solely within logical reasoning (while the point of Zilberman's analysis is that analogy resides, first and foremost, in philosophy).

Interestingly enough, the very distinction of philosophy and logic is of 'analogical' nature, and is important 'analogically'. It helps to understand what analogy as such is, and what a relationship between philosophy and logic should be.

The apparently prior position of logic can be explained, according to Zilberman, by its interpretation as a 'formal projection of thinking'. What kind of thinking (or, rather, whose thinking) is meant here? Classical Indian culture is particularly careful about the distinction between individual and group thinking. This distinction is rooted in basic universals of classical Indian culture which Zilberman calls a background (or a structural principle) of the entire Indian civilization; i.e., the *Veda*, and a universal mechanism of mental activity within this culture, in other words, a method of *vicalpa* or 'dividual thinking'.

The *Veda*, an enormous collection of texts identified as myths, primitive philosophemes, elementary ideas about nature and society, and records of mystical experience, is for Indians, according to Zilberman, much more than just texts and their content; the *Veda* "is like the God of the Bible." (55) The *Veda* can also be interpreted as Absolute (but of a special kind, as a cultural, or, as Zilberman puts it, a 'sur-real Absolute, the Absolute of knowledge). Indian philosophies, thus, do not have to deal with Absolute as a physical entity, or as natural projection of a world, and, therefore, with Nature and natural-ness as such. As soon as the *Veda* became a foundation of classical Indian culture, separation of culture and Nature, non-inserted-ness of the human/cultural dimension into natural processes, was a self-evident truth. This explains why no attempt to naturalize their subject-matters was undertaken in classical Indian philosophies. According to Zilberman, where the western philosopher is sure to feel disturbed by any suggestion of denaturalizing his investigation (since it makes him feel as though he were losing the ground from under his feet, as

though he were being placed in a vacuum instead), the Indian classical philosopher is not, because he has his written Absolute - the *Veda* - in front of him. (56)

But by the very fact that the *Veda* (an artificial, written Absolute) does not belong to the physical world, and is thus not a part of Nature, it cannot spontaneously transform this Absolute into a human world, into a place suitable for human existence. If we imagine this written Absolute as an enormous collection of knowledge, as well as a set of meanings, rules, and regulations pertaining to human existence, then the problem is how to share at least the most important parts of this collection with everybody entering this world. The complexity of such a problem is certainly enormous, for several reasons. First, because the *Veda* is not and has never been a religion. It is simply impossible to believe in it and thus to take its meanings as something divine and obligatory. Second, for Hindu scholars the *Veda* is something which exists naturally and therefore, its existence is not subject to question (like Nature for the Western mind). The *Veda* also has never become a part of a legal system, as happened, for instance, to Confucianism.

Zilberman interprets this as immanent de-naturalization of the linguistic content of the Veda by denying all natural references (for any knowledge, from divine to positive 'natural'). Ascribing the same existential status to all elements of the Veda solves a problem with finding a reality of such Vedic objects (since they are not real).

> When taken as a *systematic* object of thinking, all elements found in the *Veda* could be considered real in so far as they were elements of the Vedic system. Therefore, the *Veda* could no longer be considered a myth, a collection of myths, or a language-like object. Consequently, in the *Veda* we have a most impressive case of *manipulation with metalanguages without having a single language of description!* This, of course, is impossible to comprehend and attain for the individual human consciousness from any particular vantage point of cognition. However, this is quite attainable by means of the 'socialized' (= 'dividually constructed') cognitive approach to the Veda. (57)

An individual can be inserted in this artificial, but not immanent Absolute of the *Veda*, an Absolute which in fact is a transcendental entity (although different from Nature), through a certain joint, collective, 'socialized' mental activity, a 'dividually constructed' thinking - *vicalpa*. The major intention of *vicalpa* as a method of learning or introducing into the Vedic culture is to construct by the student:

> *a new type of thinking for himself*, but in the 'divided way', in order to get it socialized between his teacher and himself [. . .] On the surface it looked like an approximation of a student's speech potency to a teacher's language capacity [. . .] Actually, however, a mental interaction of both teacher and pupil works as a 'dividual' semantic implementation which has been, from

> no one's vantage point, symbolically superimposed upon the not-yet-existent object, that is, upon *language* (as *we* know it) as a structured activity of thinking. (58)

Dividual/divided thinking may also be presented through the traditional *yoga*, when "not 'language' but the physical body of the *yogin* itself is what was used as a substratum and presented as a 'metamorphic form' of dividual thinking." (59) Both linguistic and physical implementations of 'dividual thinking' have basically the same cultural message: they teach how to share 'something' with a novice without the involvement of a naturalized projection of this given 'something'. *Vicalpa* helps attune the consciousness of a pupil into a wave of a cultural transmission (if to agree, that a teacher shares and represents a cultural paradigm, i.e., the *Veda*). A note on the concept of 'double knowledge' mentioned in one of Zilberman's letters (where he says that an intermediator between different kinds of knowledge in this double structure is analogy (60)) can certainly be helpful here.

With knowledge left to the care of professionals, average participants of cultural interactions have to obey certain minimal requirements for effective communication; i.e., follow normal (or normative) patterns of thinking. These norms come from logic; logic, thus, becomes a 'formal projection of thinking'.

When, however, not an individual, but:

> a 'dividual' (group) consciousness is concerned, the situation changes and philosophy, not logic, step forward in their active relation to the world. Thus, it [philosophy] results from such development of consciousness when it attempts to tear down the logical cosmos, to surpass the traditionality of group cooperation. Logic, on the contrary, can be regarded as quite an opposite phenomenon, as a means of an active [real] traditionalization. (61)

Philosophy and logic, furthermore, are preoccupied with different images of the world.

> A cultural universe of Indian society can be analyzed according to a model of correlating philosophy and logic when both appear to be changing phenomenologically, but not in [their major] principles. [. . .] the task of philosophy is formulated as an analysis of interrelations between the worlds of objects [things], language, and thinking, while a model of a closed cosmos of tradition is represented by identifying these with each other, by not taking into consideration a proper sense of one of them. What becomes fully established within the consciousness of the possessors of Indian culture, owing to this tendency, is the idea that things of the world are not only identical to logic, but are surpassed by it, [in the same manner] as a system of normative culture logically precedes a system of social actions. (62)

Zilberman calls this idea a 'panenlogism' (as compared to Hegel's 'panlogism', in the sense of a much more universal interpretation of logic in classical Indian culture). 'Panenlogism' of Indian thinking points out to another dimension of 'individual' analogy, namely, its content 'cut', through a correlation with cultural tradition. This 'cut' becomes an object of a detailed analysis when the second level of *upamāna* is examined.

That both philosophy and logic rest on, or construct, analogous images of the cultural universe can be shown, first of all, by the only one cultural world (Vedic universe) permitted, i.e., regarded as legitimate, within classical Indian civilization. Their significance for exploring analogy can also be proved by the fact that they do not reflect upon Nature and thus do not provide a unified ontological image of the world. Taken 'analogically' this means that Indian philosophy (and logic as well) rejects any immediate contact between thought and Nature, between reflection and its object. It thus refuses to acknowledge any analogy between them. Indian philosophy rests on the assumption of 'auto-analogy', analogizing with a content of thoughts themselves, either as such, or as transferred into cultural realities.

This analogizing, however, will certainly look different when considered with respect to 'individual', or 'dividual' ('universal') thinking; i.e., within logic, or philosophy. As mentioned above, analogy in logic remains reduced to basically one type (*upamāna*), although taken in different dimensions. Gangesa analyzes this type in the major Indian logical treatise on analogy, the *Tattvacintāmaṇi*, in the Section on Submeasuring (*The Upamāna-Kāṇḍa*).

Upamāna is interpreted in these texts as a peculiar form of logical inference (from particular to particular), and is opposed to syllogism (with its general and particular premises). According to this interpretation, general judgments cannot be the premises of a syllogism (because they exist only as pure tautologies and are, therefore, useless for logical deduction). Aristotle defines inference from particular to particular as deduction by analogy (or 'by means of example'). (63) That is the closest approximation to Western logic which the reader can find in *upamāna*; such an approach, however, is not close enough for a proper understanding of *upamāna*. Perhaps this is the reason why Zilberman advises the reader not to be misled by a Western idea of analogy, and not even to use this word.

Upamāna, according to Zilberman's interpretation of Gaṅgesā's ideas:

> has three different levels: the objective one, consisting of logical relations (of generalization, specification, subordination, etc.) between the items of comparison; the level of communication between the 'informer' and 'informed', involving important issues of general linguistics and semiotics; and the level of interaction. with the 'dividual' subject of knowledge by analogy, requiring two separate social roles of the teacher and the pupil who performed different, though reciprocal, epistemic acts of direct awareness of the verbal testimony, its actualization in the perceptive experience,

> and the reciprocal operation (*vyāpāra*) as a 'socialized' aspect of the reflective analogous apprehension `(*atideśavākyaṇunyāvasayà*). (64)

This complicated structure clearly prevents *upamāna* from being formalized. It also reflects what was already pointed out as the two projections of an 'individual' analogy:

(1) through logic - as analogy with structures of knowledge, when individual experience is shaped in accordance with them;
(2) through tradition - as analogy with fragments of absolute knowledge preserved in experts' opinions and available for those who learn things within this culture by participation in 'dividual' thinking, i.e., through *vicalpa*.

Upamāna could be better reflected through Zilberman's approach to 'a logical structure of tradition', which, in a letter to Prof. Kinnan (September 12, 1974) he characterizes as follows:

> Previously a tradition was interpreted either mechanically, i.e., as certain mechanisms of reproduction of social institutions and norms, when a maintenance of the latter is legitimized by the fact of their existence in the past, or substantially, i.e., as social regulations and norms themselves which are reproduced as such (as a 'cultural legacy'). I am determined to interpret tradition *intentionally* , i.e., as a readiness to understand certain messages transmitted, obviously with a specific purpose, by an authoritative source of tradition. You remember Pimen from [Pushkin's] *Boris Godunov*:
>
> 'A day will come when some laborious monk
> Will bring to light my zealous, nameless toil,
> Kindle, as I, his lamp, and from the parchment
> Shaking the dust of ages will transcribe
> My chronicles, that thus posterity
> The bygone fortunes of the orthodox
> Of their own land may learn . . .
> . . . In old age
> I live anew; the past unrolls before me -
> Did it in years long vanished sweep along,
> Full of events, and troubled like the deep?
> Now it is hushed and tranquil. Few the faces
> Which memory hath saved for me, and few
> The words which have come down to me -the rest
> Have perished, never to return . . .'
>
> Indians reduce, very simply and in an extremely elegant manner, this kind of intentionalized transferring and discovery of a new knowledge to a structure of an inference by analogy. (65)

In logical terms this transferring is a specific relationship between immediate perception and authoritative testimony which embraces the perceptional fact; it is formed as “an interpretation of immediate perception in accordance with authoritative judgment” and represents “a major cultural function of a deduction by analogy in India.” (66) Such a statement, seemingly clear and easy to understand, becomes, however, a real puzzle when compared to another statement by Zilberman:

> the unusual role of deduction by analogy in Indian philosophical analysis appears to be perfectly demonstrated: not as a means to discover new knowledge, but as a means not to discover it, i.e., as a reduction of every fact of experience to a ready-made scheme of logical, psychological and semantic principles. (67)

This implies not just a rejection of the obviously wrong assumption that it is possible to immediately acquire new knowledge from perceptual experience, but also a rejection of a more sophisticated idea about feasible similarities and resemblances between the outer world and what might be considered its cognitive images. Knowledge is determined by certain inner structures, with external experiences that serve only as a pretext for its revelation. A scale of such revelation may be different; there are, apparently, some kinds of knowledge which could never become totally transparent, and thus remain transcendental (knowledge of Brahman, for instance, or of a posthumous existence). But in each case knowledge arises as a certain insightful movement, in which the most important role is played not by perception, but by sources of its assimilation available for consciousness. These sources originate from cultural tradition; they arise in response to an intention to make understanding both possible and universal.

Zilberman in his *Approaching Discourses Between Three Persons on Modal Methodology and Summa Metaphisicorum* expresses the same idea when he compares Kuhn’s *Structure of Scientific Revolutions* and Gangesa’s *Tattvacintāmaṇi*:

> Being preoccupied with a theory of analogy in an ancient Indian tractate and reading at the same time the book by Kuhn, *Structure of Scientific Revolutions,* I notice places where here and there it is being talked about in almost the same way, with that small difference that where Kuhn raises questions, Gangesa already has answers [. . .] Speaking plainly, Kuhn’s book is historically generated by ‘painful problems’ in the philosophy of science; it represents, so to speak, a ‘cream of immediate results’, a reflection about what is ‘evaded and deployed’ in western empirical-experimental science which itself is composed as a chain of mutually-reflected ego-paradigms, etc.; whereas [what is presented] by Indians is a reduction of everything immediate, individual - through analogy - to the eternity of a legend [tradition]. (68)

The very possibility of reducing, through analogy, any immediate, individual knowledge to the eternity of tradition is based on a peculiar mechanism of equation:

> It seems evident, that some universal organizing mechanism existed within the Indian Universe, mechanism, which led cognition [of this Universe] and activity [within this Universe] into their equivalence. This mechanism may be defined as 'tradition'. (69)

Such an equation becomes possible due to a specific 'knowledgeable' interpretation of cultural tradition undertaken by Zilberman. According to him, tradition accumulates, or is presented by a peculiar kind of knowledge, and by its specific forms. This kind of knowledge is absolute knowledge; its forms are the content and formal (logical) paradigms of thinking accepted as legitimate within a certain culture. [70] *Upamāna*, then, can be presented as an extremely complicated and sophisticated mechanism of a 'Submeasuring' bringing individual knowledge to the level of absolute paradigm accumulated by and within tradition.

The final, and perhaps the most interesting case of analogization, is presented by classical Indian philosophies themselves. Actually, there is not just one, but two cases (if we take into account that these philosophies analogically relate to each other, first, through their subject-matters, and, secondly, through being grasped as 'a team of strange symbolic creatures' in the so-called 'mirror-strategy'). The first case is an object of analysis in Zilberman's text placed in the present volume, *Advaita-Vedānta: Śariraka-Bhāṣyā,* where Zilberman follows speculations of different *darśanas* on a problem of the imposition ('bracketing') of certain properties. When their opinions are clarified, the *darśanas* themselves appear analogical in respect to each other, if we are to judge them by their understanding of the imposition of properties. (71)

This implementation of analogy springs from the very essence of the cultural 'sur-realization' of Indian *darśanas*. It is the Hindu philosophy which introduced, interpreted, and indeed created the first and fundamental model (or paradigm) of classical Indian culture, the Vedic Universe. If so, then owing to a perfect familiarity with their own creation, as well as to invention of rules and regulations for referring to this primary analogy, Hindu *darśanas* themselves became the basic analogies of classical Indian culture. In that sense they are the absolute analogies, analogies as such, models for analogizing analyzed from the point of their content. Taken in their cultural sense classical Indian philosophies, according to Zilberman, create a generalized form of tradition. They simultaneously represent a standard of the traditional activity (or a universal principle of the traditional Universe of Indian culture). The channels of realization of tradition, as well as peculiar ways of analogizing (ways different in each case), are the six Hindu *darśanas* themselves. Zilberman sketches their analogically-traditional implications, and indicates the following sequence of fundamental analogies:

- *Vedānta*: 'Thought as Action';
- *Mīmāmsā*: 'Action as Thought';
- *Nyāya*: 'Word as Thought';
- *Vaiśesikā*: 'Thought as Word';
- *Saṁkhyā*: 'Action as Word';
- *Yoga*: 'Word as Action'.

These basic analogies are mutually supplementary; taken as complementary, they exhaust, according to Zilberman, all possible correlations between the three fundamental modes of human activity in the Vedic Universe (Thought, Word, Action).

In addition to being fundamental and complementary to each other, these all-embracing analogies are models (or paradigms) for further analogizing within classical Indian culture. They also serve as a foundation for prospective analogizing. (72) Unfortunately, there has been no further development of these ideas in Zilberman's texts, except the outline of his course on this subject at Brandeis University. (73)

This reasoning can be taken as a pathway to another one of Zilberman's interpretation of analogy (or, rather, to another type of philosophical analogy, with regard not to its cultural implementation, but to the immediate content of Indian *darśanas)*. Zilberman describes this type as a 'mirror-strategy'. Reproduction of a 'mirror-strategy' as connected to the topic of analogy occupies a significant place in this Introduction for two reasons. First, a 'mirror-strategy' probably represents Zilberman's most interesting and important development of the notion of philosophical analogy. Secondly, since this strategy is thoroughly reflected in Zilberman's *The Birth of Meaning In Hindu Thought*, the editors decided not to reprint these materials but present relevant material in our Introductory Essay.

Classical Indian culture was a highly unusual cultural body from a philosophical point of view in that it was entirely and quite openly created by Hindu philosophies. According to modal methodology, however, classical Indian philosophy performed something even more impressive than constructing the cultural body of Indian civilization: it constructed itself. Having been created within this culture, classical Indian philosophy was certainly still a part of this culture and in that sense a 'cultural thing', but of very unusual sort. This part appears to be bigger than a whole (something of that sort is apparently meant by Zilberman in his mysterious phrase on "a life which is too ideal for a philosophical activity as making a philosophy" (74)).

What happened here was a peculiar return of philosophy from its cultural 'incarnation' to its 'plain self', a return in which all previous projections and implementations were preserved in quite a paradoxical form. This co-existence can be compared to:

> the popular illustration of how the relativity principle works in the field of gravity. According to Einstein, there are some points in space where gravity

> grows so intensely that it forces rays of light to form a circle - and thus, a 'light trap' develops. So, everyone who places himself at such a point would still be sure that he looks straight ahead - but there, in front of him, he will see [. . .] another person [. . .] who is he himself. (75)

That this illustration is quite suitable here, can be confirmed by another extract from Zilberman's texts in which he uses a principle of a complete inner reflection to describe his own philosophy:

> My object [philosophy] should be constructed for you, if any physical parallel is suitable here, according to a principle of a complete inner reflection, which may be revealed through an idea of 'closed spheres of gravitation'. (76)

These spheres can be metaphorically presented as:

> opaline, gently shining balls, but the point is that even if these spheres are considered to be existent, it would be still impossible to see them, because your ray of vision is closed within any of these spheres and you will see only an infinite space, not spheres." (77)

In order to explain this invisibility, in fact, non-existence, of philosophy, let us turn again to that long path which Indian classical philosophies went through. After their incarnation in the body of classical Indian civilization, these philosophies still performed their cultural service. When classical Indian culture was transformed into a living tradition (and when, correspondingly, a cultural need for a philosophical support of its normal existence was drastically diminished), Indian philosophies served their culture only ritually. After producing a peculiar philosophy of ritual (*Mīmāmsā*), classical Indian philosophies initiated their gradual withdrawal from immediate participation in cultural life and, later, from existent culture as such. They turned to their own, purely philosophical development, a genuine speculative philosophizing.

Zilberman identifies this movement of classical Indian philosophies as a practical resolution of a principal Vedic antinomy. Such antinomy has been deployed between a necessity to share a cultural meaning of the *Veda* with every member of this society and a vital cultural need to keep this meaning untouched and unchanged (which was enormously important for preservation of cultural identity). This practical resolution acquired a form of

> developing a set of systems of philosophical thinking, relentlessly criticizing each other, and pervasively, mutually penetrating one another's complete inner negative reflections. (78)

Such reflections created a curtain for the *Veda*. It was, thus, the *Veda* itself, which completely disappeared from the mental horizon of every philosophy-

participant of these discussions. Disappearance of the *Veda* (or, for this matter, its putting aside, leaving behind) means that the Vedic cultural ('sur'-) reality was not shared by the six Indian *darśanas* anymore; they left their cultural space (indeed *their* cultural space, since they created it and were developed together with it).

It is significant to recall that the very word *darśana* means 'vision'. Therefore, the family of the six classical Indian philosophies – *Saṁkhyā, Nyāya, Vedānta, Mīmāmsā, Vaiśesikā, and Yoga* - "comprises six 'visions'. Visions - of what? Visions of whom? And what is it, an 'exclusive vision'?", asks Zilberman. He explains:

> Generally speaking, six different visions of the *Veda* or, more specially, six visions of the 'root' authoritative texts peculiar to each of the six positions and attending the *Veda* in their due turn. (79)

Yet even though they are still apparently directed to the *Veda*, such visions:

> are not just six complementary views on the pre-established thematic of the *Veda* from different standpoints. They gradually emerge through reciprocal pushing-asunder, innovations from the invented mental material and at the expense of consuming of the one's production as the food and the building material for the other. (80)

To justify this thought, Zilberman refers to a well-known idea that Indian *darśanas* complement each other and even form certain conjugalities, namely, three pairs of them. (81) He insists, however, (and this is one of his major ideas) that such pairing, or conjugation, is not a simple complementary-ness. (82) These philosophies are much more than just philosophical roles or subjective divisions of a philosophical labor. One of the mysteries of the family of Hindu philosophies is hidden in the fact that they penetrate each other substantially and thus transform each other and even present the object for each other. (83)

These ideas find some very interesting and instructive applications to Western philosophy. For example, "There are not the Galilean and Aristotelian mechanics themselves which should be compared, but different systems of philosophy [the Galilean and Aristotelian ones], one of which should be [taken as] a supplier of the idea of experience for another. Only then can this idea [of comparison] be substantiated. That is precisely what I am trying to prove with respect to a relationship between two complementary, intertwined Hindu systems: *Nyāya* and *Vaiśesikā*. *Vaiśesikā* supplies *Nyāya* with ontology and an idea of experience, *Nyāya* [provides *Vaiśesikā* with] gnoseology and logic. They are interconnected and do not require [for their existence] the world of Nature." (84)

It is important to stress that, due to their self-sufficiency, Hindu philosophies need not lean against not only the world of Nature, but any cultural foundation (even if their own 'philosophical weaving' previously created this foundation).

Hindu philosophies have no external obligations and, therefore, have a degree of freedom, which is enormous, absolute, and unrestricted by anything, even the *Veda* itself. In order to understand this total negativity (negativity with regard to everything considered to be existent, either naturally, or socially) of a philosophical 'subject-matter' in the classical Indian case, Zilberman turns to the 'doctrine of double knowledge'. This doctrine is shared by all six Hindu philosophies, but is developed predominantly by *Advaita*. It is important to remember that because the object of consideration is now philosophy, not just learning by means of *vicalpa*, the only knowledge legitimate within such an analysis is absolute. In addition, as always, when the concept of a 'double knowledge' appears, exploration of analogy will follow (in this particular case, within a 'mirror-strategy').

A doubling of philosophical knowledge, according to *Vedānta*, becomes possible due to a special status acquired by absolute knowledge within classical Indian philosophies. This peculiar status combines 'extra-referential-ness' (*paramārthika*) and 'transactivity' (*vyāvahārika*) of absolute knowledge. 'Extra-referential-ness' of knowledge in Hindu philosophies means that knowledge is beyond any references (because it cannot be proved by anything except itself, as well as by another piece of equivalent knowledge). 'Transactivity' describes the activity of transferring a burden of proof from one philosophical fragment (or 'vision') to another. The main idea of this doctrine is that a 'double knowledge' can be referred only to those collections of texts, which have been produced from the standpoint of each of the six *darśanas*. This knowledge, or the result of philosophizing, thus, is not about something existent (either really, or 'sur-really' if to consider 'sur-reality' in its existential mode, i.e., as cultural 'sur-realization'). Its alienation from existence is reflected by this double nature - of being 'extra-referential' (i.e., non-related to anything except itself) and 'transactive' (i.e., active, but personified in *darśanas* only, as a transient form of activity from one *darśana* to another).

The doctrine, therefore:

> refers completely and exclusively to the *corpora of texts*, produced from the standpoint of each of the six reflections and encapsulated in their corresponding traditions. The 'root' text of each tradition [*darśana* - H.G.] is acknowledged as a 'seat' of transcendental knowledge. The hierarchy of productions of 'transactive', or 'practical' knowledge [. . .] is built on the basis of the root text. Thus, it belongs to that text immediately, takes a firm stand on it - but never includes it. Linking one text to another indicates the way of expansion of each particular philosophical tradition into 'no-one's mental space [. . .] which is 'thought-off' from a possible mental space in which the *corpora of texts* of some other tradition would otherwise be located. Therefore, the other 'root' text, with its content, contains only 'transactive' knowledge, of course, when looked at from a position of the first 'reflection'. (85)

As in the following case:

> Both *Advaita* and *Buddhism* had a theory of 'double knowledge'. But if in *Advaita* its Absolute, that of *Brahman*, is 'really absolute', while everything else is relative (including, in particular, that Absolute which is considered to be such by *Buddhism*) then in *Buddhism* everything is *vice versa*. So, modal methodology takes that philosophical system which gives us its perspective in a certain moment of modal consideration, which lets us use it as an initial point of modalization, will be the absolute one, while all the others will be transactive, i.e., conventional ones. You see, we find an Archimedes' 'point of rest'. Depending upon *Nyāya* [Zilberman at this letter analyzes a relationship of *Nyāya* and *Vaiśesikā* - H.G.] we can interpret concepts of *Vaiśesikā as if* they are natural objects of experience. And this is precisely what I call a quasi-naturalization or behaviourization of thinking. From now on, it [modal analysis] is not an idle running round in a small circle of six modal oppositions anymore. This [creates] an enormous, and still untouched amount of activity for a transition of philosophically 'raw material' into philosophy itself. (86)

This 'Archimedes' point of rest' allows:

> you to take any [philosophical] text and see through it and from it the whole future universe. The freedom is certainly enormous. Since I am not tied to a physical world anymore, I am almost surely in a possibility of a great scholastic synthesis. And if a medieval synthesis was done on a natural foundation of theology, then here a constructive activity is an undertaking without any external obligations. (87)

Analogy plays a major part in such a synthesis: the very philosophical systems are regarded as peculiar analogies of and for each other. This becomes evident first through their positioning in different encounters with each other, as either absolute or transactive knowledge. Zilberman shapes the dialectics of extra-referential and transactive knowledge as a possibility for every philosophical system to be taken both absolutely and transactively, depending on its role in a particular modal inter-connection. In other words, each philosophical system can be regarded either as a 'modal mirror', or as a certain 'image in a modal mirror'. Zilberman calls this a "principle of a mental constitution when philosophical systems are inclined to each other in an eternal and 'mirror' vision." (88)

This principle, or the 'mirror strategy', can extend a horizon of philosophizing enormously: within a sum of interactions each system is capable of performing an infinite number of reflections and of revealing an unlimited quantity of images.

> That is why, it is necessary to speak about inclination of different systems, not just fragments of the same system; by this (very approach - H.G.) a habitual horizon of philosophizing is multiplied infinitely. (89)

Such multiplication, however, can be achieved only with a certain 'permission' to augment the number of ontological images of the world. In Indian classical philosophy such permission is given by a quasi-naturalistic doctrine of *Māyā* ('transcendental illusion' when interpreted from an ontological point of view) or *avidyā* ('nescience', if approached epistemologically). Quite often both of them (*māyā* and *avidyā*) are viewed as a principle of universal ignorance, ignorance of a cosmic proportion (about everything existent in the world), as well as praise for non-existence. (90) Zilberman intends to interpret them as permission to multiply modal images of philosophies in their 'mutual mirroring', and as a methodological strategy of how to use this permission in a practice of philosophizing. (91)

Interpreted in this modal way, texts of classical Indian philosophy create a special 'inter-textual' domain of philosophy, a domain of non-natural-ness (when referred to Nature), and non-existence (while taken culturally), in short, as a 'mirroring existence'. Since such 'inter-text' (which Zilberman calls a 'sur-cultural' dimension of Hindu philosophies) cannot be depicted or referred to as a certain subject-matter, it should be taken as non-natural and non-existent. This latter remark - that there is no pre-given 'subject-matter' prior to a philosophical analysis, because this analysis [at least, in the Indian case] is *not*, is not existent, and *is* thus *nowhere* - is significant as a confirmation of the idea of modal methodology that philosophical 'subject-matter' can be only philosophy itself.

The peculiarity of this dimension of Hindu philosophizing is so striking that it creates difficulties even with its attribution. Within the already proposed distinction between the reality of Nature and the 'sur-reality' of culture, the 'inter-textual' dimension of classical Indian philosophy is closer to cultural 'sur-reality'. However, this 'sur-realism' of 'inter-textual-ness' appears to be doubled (since it becomes 'sur-real' with regard to another 'sur-reality', that of culture). This calls for another definition of 'sur-sur-reality'. A solution which comes naturally is to name this dimension of philosophizing a 'sur-cultural' development of Hindu philosophies, while the result of this philosophizing - a 'sur-cultural reality', or 'texture' (if we use Zilberman's notion). Initially this notion was proposed for a peculiar textual interpretation of the *Veda*. (92)

Assuming that "the major distinctive feature of the *Veda* interpreted as a 'texture' is its acting essence, its pure performance ('mirroring') in a social life, and its 'form' as contrasted to a cultural 'content' " (93), it appears quite possible to use this notion to define purely philosophical activity which springs from text, develops as text, and results in texts related to each other, in an 'inter-text'. 'Texture' is a complex notion which reflects all sides of Hindu philosophies; namely, philosophizing or philosophical activity as such, the result of this philosophizing, and a return of philosophizing from its cultural unfolding to itself,

to its own paradoxical existence in texts and through texts (but not in something natural (real) or cultural ('sur-real')).

If we use a notion of text to describe this non-existent textual state of philosophy, then a new textual implementation of philosophy (as a 'texture') can be hardly distinguished from a mostly formal grasping of the idea of text as a container for major ideas of a certain philosophy. 'Texture' is closer to what Zilberman calls 'a philosophical body', or a 'philosophical substance'. These notions were used in Zilberman's analysis of a failure of the well-known attempt of Plato to create a 'body of philosophy'. Zilberman considers this attempt as erroneous because what resulted from it could be regarded only as a 'scientific body', not a 'philosophical one (with the implication that such a creation is impossible within Western philosophy as such). (94)

Western philosophy, nevertheless, creates an impressive multitude of philosophical texts. Do they become a 'texture', a 'philosophical body'? Zilberman doubts this; he mentions, in one of his letters, that Western philosophy is exhausted by its textual creativity, and such an exhaustion prevents its own emergence as a 'philosophical body'. (95) Western philosophy is textualized, but not textured; its texts are not transformed into 'inter-text'/'philosophical body'/ 'texture'. Through this distinction the reader can reach a deeper understanding of that difference between Western and Indian philosophical texts which Zilberman so often turns to in the present volume.

There is another interesting question: whether texture may be created by any given philosophy, or whether (as a 'philosophical body') it should be common to a number of philosophies which belong to a certain culture and perform their inter-connected 'philosophical weaving'. Classical Indian philosophies have a unified 'texture', one 'philosophical body' shared by all or, rather, created by their joint activity (as in the 'mutual modal mirroring'). A prerequisite for such interpretation is a purely formal fact pointed out by Zilberman; namely, that these philosophies exhaust six possible modal combinations (of N, I, and V in three positions). Certainly, this 'philosophical body' is not just a mathematical 'sum' of contents of such philosophies, since their mutual mirroring' appears to be infinite.

This paradoxical co-existence of fixable (philosophical texts) and non-existent (texts' images, philosophical 'texture') dimensions leads to numerous confusions of Western philosophy when it attempts to interpret classical Indian philosophies. Basically what is usually grasped, even by a very careful Western reconstruction, is only philosophical text, never its 'texture'. 'Soaring' from Indian texts to a Hindu 'texture' is hardly achievable within a Western interpretation. (This is also true for the case of performing such a 'soaring' within its own philosophizing.) It is, perhaps, not accidental that Zilberman determines the goal of modalization with regard to Western philosophies as "not a reconstruction, but - a soaring." (96)

Within *darśanas,* such textual de-materialization is part of their usual activity. Zilberman describes one example of this liberation from text below:

> Śri-Śaṅkarā-caryā, the greatest Hindu philosopher [. . .] says, that his *Advaita-Vedānta* would be unnecessary as metaphysics and would not be the 'first philosophy' if different philosophical schools were not active in producing their heteromorphic views of reality. Their productive activity (*pravṙtti*) compels the *Advaitin*, in turn, to busy himself with his specific *methodological* work, which leads to their critical 'de-realization'. In particular, the *Vedā ntin* says that his task is to define the prerequisites in relation to which there results a desire to know the Real *only* because there are some texts available in which the Real is mentioned and interpreted as a requirement of cognition. These texts have come into being mainly due to the *Mīmāmsākà*s exegetical activity. On the other hand, the texts of *Mīmāmsā* are not composed in vain. The only way for the *Advaitin* to come to know the real is through criticizing them, with the result that he retains liberation from the text. (97)

Such liberalization (or soaring) of *darśana,* both from its 'root' text and from texts of the counterpoising *darśanas,* is achieved through a comparison of many texts done through their 'mutual textual mirroring' resulted in 'texture'. 'Texture' is also interpreted by Zilberman as a peculiar mental Universe (or Universes). It is important to note that such a Universe (and Zilberman emphasizes this point) does not belong to culture.

If we analyze "the universes of the corresponding 'visions' [. . .] nobody can say which societies share these universes." (98) In his letter to V.Lefebvre, Zilberman also touches upon this point in a certain generalized sense when he asks his correspondent: "Would you agree, that philosophy is precisely such a reality about which it is impossible to say, whether it is inside a culture or outside it? A frame for its (philosophy's - H.G.) nature is still not found." (99) It seems that such generalization concerns basically two things: (1) Zilberman speaks here about the entire body of philosophy, not just about classical Indian philosophies, and (2) he has in mind a complete modal scheme of any philosophy (not only its 'texture' but also text and cultural 'sur-reality'). Cultural 'sur-reality' therefore appears to be precisely this ambivalent component of a modal structure of philosophy, which does not permit Zilberman to interpret philosophical reality and nature as definitely extra-cultural. As for a 'texture' of Indian 'visions', Zilberman defines a 'beyond-cultural' and 'certainly-non-social' entity.

The statement on the 'above-cultural-ness' of Hindu philosophies (when they became a 'texture', i.e., after they have acquired their 'reflective philosophical body') allows Zilberman to initiate a detailed investigation of the philosophical Universe of *darśanas* independently of any cultural characteristics. Such double independence is considered possible (or achievable) in modal methodology through a notion of 'absolute knowledge' which belongs to (or emanates from) a pure theoretical thinking. Pure theoretical thinking unfolds (as Zilberman called it) within "an absolute reality of an intra-theoretical universe", (100) a reality, which becomes a major paradigm (or a sum of paradigms) for analogizing in intra-philosophical dimension. (101)

Extremely complicated relationships between the six 'visions' within a 'multinomial' realm, or universe, or 'texture' of Hindu philosophy Zilberman calls here "a ritual polemic dramatization" (102). Its goal, among others, is the immediate survival of the disputants as the members of a special philosophical community. This quite unexpected interpretation, however, has its deep philosophical roots in what Zilberman calls a partnership or sharing of a work and of the responsibility of philosophers involved (due to the complementariness of their systems described above) in the same universe of philosophizing. (103)

Classical Indian philosophies, therefore, present their philosophizing as a mutual inter-dependent and analogizing activity, where everyone helps each other with their particular creative philosophizing which is not possible or achievable to others (as, to continue the 'mirror' explanation, we can see something, not visible otherwise, i.e., naturally, in a mirror). Hindu philosophies consider this as a spontaneous division of a philosophical labor, quite natural and inevitable within a joint constructing of a 'philosophical body'/'substance'/'texture'.

> In fact, in India we meet with an organic scheme of philosophizing, shaped as a materialization of the dream of all philosophers (cf. Socrates' talk about endless philosophical discussion in the *Phaedro*, Hegel's idea of Absolute Knowledge as a Life-long Cognition in the concluding chapter of his *Phenomenology*, and so on). (104)

The realization of this dream in Indian 'visions' transforms them into a relentless whole-embracing philosophical activity where discussion is embarked upon in order not to destroy another philosophical system, but to supply it with something important and unattainable; to present its own 'reflective mirror' (its knowledge) for reflection. A 'natural' consequence of such joint universal activity (although combined with other peculiarities of Hindu 'visions' already analyzed) appears to be a gigantic system of accumulated philosophical contents: an infinite amount of 'reflective images' already attained and still possible. What is particularly interesting for Zilberman within this Universe (he also calls it a 'parade', a 'sum', or most sympathetically a 'symphony') of Hindu 'visions' is precisely its fullness, its self-sufficiency, that paradox of Hindu philosophies, so puzzling for Western interpretation (and restraining Western philosophers from acknowledging these 'visions' as genuine philosophy), that "all problems can be solved and all paradoxes avoided in a confined universe [of philosophical knowledge]." (105)

The restrictedness of Indian philosophical knowledge, i.e., the fact that it is revealed only in six doctrines, paradoxically coincides with the possibility of finding a solution to any problem within such a universe, as well as of interpreting absurdities and, thus, of avoiding paradoxes which disable philosophizing. This mutual reinterpretation and exchange of problems, unsolvable and non-comprehended between different visions (until they find some solution - even if not in their 'native' philosophical system), is possible because of the division of philosophical labor, where various *darśanas* can see each other in reflective mirrors of

mutual analogizing. Thus, a clue for comprehending this powerful 'all-solvable' nature of Indian *darśanas* is hidden, according to Zilberman, within their philosophical Universe, in its ability to embrace everything related to philosophizing (within different 'visions') - not only knowledge as such, but not-knowledge (absurdity), as well as an ambiguous knowledge (which, when presented within various 'visions', may be both knowledge and absurdity). (106)

The idea of inter-dependent philosophizing and 'mirror-strategy' is completely alien to Western philosophy:

> Indeed there is nothing similar to the image of *māyā* in the Western philosophical tradition, and the method of an *inter-textual avidyā* [one more interpretation of a modal approach to creation of a philosophical 'texture'] is alien to it. Perhaps, the most congenial image ever woven in the West is Hegel's *essential* representation of the *porosity* of Matter whose properties cede one another the right and position where to be called 'entities', which are like the threads in a fabric, and this 'ceding' is hopelessly natural. What can be said, for example, about the intention of these reciprocal 'givings-up' to exfoliate the image from the canvas? Or [. . .] by what means can penetration into strange contexts and their authentic understanding be accomplished? (107)

This makes more transparent a nature of troubles experienced with analogy by Western philosophy. Analogy does not fit into the very essence of philosophizing and the structure of philosophical knowledge as understood by Western mentality. However, since both essence and structure of it are still philosophical, they cannot escape universal regularities of philosophical thinking and, thus, get rid of analogy. Analogy appears there again and again, creating puzzles and paradoxes, frustration and bewilderment. Western philosophy has never been a philosophical Paradise, and analogy seems to play a significant part in its fall.

Nevertheless, Zilberman believes in the possibility of achieving a philosophical Paradise within Western culture - as an attempt to create, through careful modal reconstruction of separate conceptions, a philosophical 'texture'. He initiates this weaving, by reflecting certain Western philosophies in a modal 'search-light' of Indian philosophies already 'textured', in order to bring them into immediate contact with the entire variety of philosophical 'visions'. In Zilberman's texts there are many examples of comparative modalization: Hegel and *Mīmāmsā*; Kant and *Nyāya*; Husserl and *Nyāya-Vaiśesikā*; Wittgenstein and *Advaita*; Chomsky and *Advaita*; Democritus and *Vaiśesikā*; Descartes and *Yoga*; Plato and *Advaita*; psychoanalysis and *Saṁkhyā* (this is not the entire list of modalizations already fulfilled, let alone an extended enumeration of planned comparisons).

The next step in Zilberman's scheme of interpretive modalization would certainly have been a direct modal comparison of Western philosophies themselves - in order to establish (through careful modal analogizing) an inter-textual

domain of their philosophical existence: a 'texture' of Western philosophy. Unfortunately, with his untimely death, Zilberman was not allowed to fulfill any detailed modalization of this type. We only know that his immediate plans were to realize a modal line of Hegelian/Marxist/Leninist philosophical interpretation; to discover a root of Kantian transcendentalism in Hegelian logic and a root of Hegelian logic, in Husserlian phenomenology; to interpret Descartes through Husserl; to comprehend modal deployment of the major ideas of Platonic philosophy within Hegelian texts; and to explicate some failures of Husserlian phenomenology as if already modally foreseen by Hegel and Marx.

It should be precisely modal methodology which ought to supply Western philosophies with what Zilberman calls "small springs, joints, which return an integrity of (philosophical) knowledge, its multi-positioning and contradictoriness" (108), i.e., to supply them with philosophically reinterpreted modalities, which can transfer philosophy from its naturalized and/or culturalized projection into a realm of *Philosophia Universalis*.

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NOTES

(1) Ellena Michnik-Zilberman. Introduction. In: David Zilberman. *The Birth of Meaning in Hindu Thought*. Edited by Robert S. Cohen. In: *Boston Studies in the Philosophy of Science*, Vol. 102, Dordrecht/Boston/Lancaster/Tokyo: D. Reidel Publishing Company, 1988, p.XXI.

(2) Zilberman, D. *The Birth of Meaning in Hindu Thought*. Russian translation by Helena Gourko is now available (David Zilberman. *Genesis znacheniya v filosofii induizma*. Moskva: URSS Editorial, 1998)

(3) This article is published in Zilberman's *The Birth of Meaning in Hindu Thought*.

(4) David Zilberman Archive at the Mugar Library, Boston University, 1.3.15.

(5) James F. Anderson in his book *Reflections on the Analogy of Being,* was perfectly right to mention that the list of works related to the topic of analogy contains no single book in English devoted exclusively to a fundamental philosophical study of Analogy. This situation is not much changed since 1967 when Anderson's book was published, if we consider philosophical, rather than literary, investigations of analogy. It is noticeable that Anderson did not mention the fundamental and highly interesting book of Mary Hesse, *Models and Analogies in Science* (1966), since this work as well as many other valuable texts on analogy were judged to be mainly explorations of analogy in the history of science, not its philosophical analysis. It is rather curious that in *The Encyclopedia of Philosophy* (1967) one can find articles on 'Analogy in Theology' and 'Models and Analogy in Science', but no article on analogy in philosophy. An important source of philosophical knowledge concerning analogy is Rudolf Carnap's posthumously published manuscript notes on analogy (*A Basic System of Inductive Logic*. Part 2. 1980), but they are notes and still need to be extended and developed. Recently the topic of analogy becomes more and more popular and even fashionable in computer science and the theory of Artificial Intelligence (AI). AI analysis of analogy, according to specialists in the field, urgently needs a philosophical foreword and foundation. (David H. Heiman (ed.). *Analogical Reasoning*. 1989, p.142, 338)

(6) In the fundamental *Encyclopedia of Indian Philosophies* edited by Karl H. Potter, in the volume *Indian Metaphysics and Epistemology* (1977), analogy is not even mentioned, although there are several remarks on comparison. In another volume, *Advaita Vedanta up to Shankara and His Pupils* (1981), there are only four short comments on analogy. In another fundamental source on Indian philosophy (B.K.Matilal. *Perception. An Essay on Classical Indian Theories of Knowledge*. 1986)

analogy is not mentioned at all. As for special texts on analogy in Indian philosophy, they are not available in English.

(7) See Appendix 2 of this book.

(8) As Zilberman expressed it, "topically speaking, analogy can be called both a foster parent and a bastard child of philosophy." (see Appendix 1 of this book)

(9) For a better understanding of the philosophical misfortune of analogy, Zilberman undertakes a brief but insightful excursus into a history of poetry and theology within Western and Indian cultures. His conclusion here is that poetry is satisfied with the aesthetic contemplation of analogy; in poetry analogy is described as an end in itself - as a means of expression, not of resolving problems. The theologian believes that things divine and supernatural can be conceived by analogy with things natural and human; thus, analogy becomes one of the mainstays of the evidence of God (at least in Christianity) and of interpreting the world.

(10) This appearance discloses the creative essence of cultural activity in Hindu civilization, which, due to its culture-creative potential, makes Indian classical culture similar to a world created by the Hindu God.

(11) As Zilberman pointed out in *The Birth of Meaning in Hindu Thought*: "In India, the philosophical activity was organized as a specific form of the material production of meaning, and cultural significance produced by this kind of thinking turned out to be of the cardinal importance for reproduction of the whole social system of Hinduism"(p.3).

(12) With regard to analogy, this requirement is quite substantiated by a recent development of scientific thinking in Western culture. Although it is still the most wide spread opinion that scientific thinking is purely (or predominantly) analytic and that precisely because of its analytical and reflective nature science can bring genuine and trustworthy knowledge about the world and nature, Zilberman argues that scientific thinking quite obviously contains analogical reasoning as a significant (and perhaps a major) part. This assertion was made by Zilberman in the beginning of the 70's, when there were as yet no serious attempts to imitate human thinking by other agents (i.e., computers). These attempts, initiated on a broad scale only in the middle of the 80's, immediately demonstrated the sterility of previous endeavors of philosophy, logic and linguistics to account for the cognitive processes as fundamentally analytical and deductive rather than analogical and metaphorical. In real human thinking, the meanings of concepts appear to be the most important and changeable part of cognitive activity. It is precisely meaning that becomes the active agent of cognition modified and extended by parallels, models, analogies, and metaphors (while the rational steps from premises to conclusion are generally non-demonstrative, and thus are carried out by hypothetical and analogical reasoning). Meaningful experience of the world turns out to be that key factor which, through its (presumable) structural isomorphism with this world, allows us to understand (or, at least, to pretend to understand) the world and, thus, to organize a proper cognitive process. Analogical reasoning, i.e., a remarkable ability of people to understand new situations by analogy to the old ones, to comprehend metaphors, and to solve problems based on previously solved, analogous problems, is considered now (by research results of AI and computer scientists) to be the most important ingredient of human thinking needed for the transfer to AI (or for teaching computers to think). Here we need not judge the possibility of creating Artificial Intelligence, we only emphasize the very meaning of analogy (when imitation of the creativity of human thinking is concerned).

(13) Zilberman, D. *Pis'mo O. Genisaretskomu [Letter to O.Genisaretskij]*. Undated, s.1. Zilberman Archive, 5.1.3./6.

(14) Zilberman, D. *Pis'mo G. Schedrovitskomu [Letter to G.Schedrovitskij]*. October 15, 1976, s.2. Zilberman Archive, 5.1.2./6.

(15) Zilberman. D. *Letter to Prof. Thayer*. July 25, 1974, p.4. Zilberman Archive, 5.2.7./1.

(16) Zilberman, D. *How Does the Metaphilosophy Appear*. Unpublished Manuscript, p.1. Zilberman Archive, 2.1.13.

(17) *Ibid.*

(18) *Ibid.*

(19) Zilberman, D. *Pis'mo Y. levade [Letter to Y. Levada]*. June 20, 1974, s.3. Zilberman Archive, 5.1.1./3.

(20) *Ibid.*

(21) Zilberman, D. *Pis'mo O.Genisaretskomu [Letter to O.Genisaretskij]*. Undated, s.2. Zilberman Archive, 2.1.2./12.

(22) Zilberman. D. *Pis'mo Aronu [Letter to Aron]*. January 12, 1975, s.2. Zilberman Archive, 5.1.7./3.

(23) Zilberman, D. *(Pis'mo O. Genisaretskomu [Letter to O.Genisaretskij]*. July 5, 1975, s.3. Zilberman Archive, 5.1.3./2.

(24) *Ibid.*

(25) Zilberman, D. *Pis'mo G. Schedrovitskomu [Letter to G.Schedrovitskij]*. August 15, 1975, ss. 1-2. Zilberman Archive, 5.1.2./2.

(26) Zilberman, D. *Pis'mo y. Levade [Letter to Y. Levada]*. June 20, 1974, s.1. Zilberman Archive, 5.1.1/3.

(27) *Ibid.*

(28) Zilberman, D. *The Birth of Meaning in Hindu Thought*, p.12.

(29) The reader can find this description in several texts published in the present volume (on Shankara, and indirectly in *Kaṭha-Upaniṣhad*, and in *Advaita-Vedānta: Śhariraka-Bhāśyà*).

(30) As Zilberman metaphorically phrases, this was reflected in the 'secondary' (=philosophical) myth: "words initiate creation of the world when spoken by God who understands them; the effort of understanding turns words into God's thoughts [. . .]" (*The Birth of Meaning in Hindu Thought*, p.27).

(31) Zilberman, D. *Upadeśa-Sahasri*, in the present volume.

(32) Zilberman, D. 'Revelation in *Advaita-Vedānta* as an Experiment in the Semantic Destruction of Language.' In: *The Birth of Meaning in Hindu Thought*, p.222. This is especially evident in a word which does not have an empirical correlate in its habitual sense, like *Brahman*. *Brahman* is not describable; it cannot be shown by a linguistic means in a satisfactory manner since this latter is generated by *Brahman* and is thus never equal to It, either in scope, or in might. "It follows that nothing remains to be done for the realization of Brahman but to destroy these structures, deny reality to the significative language, transforming fragments of its reality into objects of activity of thinking about consciousness [. . .] The perspective arises of a different system of concepts, divorced from the opposition: 'activity-actuality'. In such a system, language becomes objectified activity; that is, a sequence of manipulative procedures of thinking about consciousness." (*Ibid.*, pp.229-230)

(33) Zilberman, D. *Po povodu 'Antareyi-Upanishagy' [Concerning 'Antareya-Upaniṣad]*, s. 1, Zilberman Archive, 2.1.7.

(34) *Ibid.*

(35) Zilberman, David. *Ocherk teorii otkroveniya (Śaṅkarā i ego shkola) [Sketch of a Theory of Revelation (Śaṅkarā and His School)]*, s.11. Zilberman Archive, 1.7.11.

(36) Zilberman, D. *Istoriya indiiskoi logiki [History of Indian Logic]*., s.164. Zilberman Archive, 4.1.1./1.

(37) Zilberman, D. *Problema tradicii s posicii social'noi psyhologii [Problem of Tradition From the Position of Social Psychology]*, s.12. Zilberman Archive, 1.7.46.

(38) Zilberman, D. *Istoriya indiiskoi logiki*, s.156.

(39) Zilberman, D. *O sociologicheskih predposylkah vozniknoveniya indiiskoi logiki [On Sociological Prerequisites of the Emergence of Indian Logic]*. s.14. Zilberman Archive, 1.7.5.

(40) See Appendix 2 of this book.

(41) See Appendix 2 of this book.

(42) See this Introduction.

(43) See Appendix 1 of this book.

(44) Zilberman, D. *Analogy in Western Philosophy: Introduction,* in the present volume.

(45) Zilberman, D. *Theories of Analogy, Western and Indian*, in the present volume.

(46) Zilberman, D. *Fragment o jāti [Fragment on Jāti]*, s.1. Zilberman Archive, 2.1.35.

(47) *Ibid.*, s.2.

(48) *Ibid.*, s.1
(49) *Ibid.*, s.2.
(50) *Ibid.*
(51) *Ibid.*
(52) Zilberman, D. *Istoriya indiiskoi logiki*, s. 160.
(53) Zilberman, D. *O sociologicheskih predposylkah vozniknoveniya indiiskoi logiki*, ss.32-33. Zilberman Archive, 1.7.5.
(54) Zilberman, D. 'Hindu Systems of Thought as Epistemic Disciplines.' In: *The Birth of Meaning in Hindu Thought*, pp.22-23.
(55) *Ibid.*, p.19.
(56) *Ibid.*, p.22.
(57) *Ibid.*, pp.25-26.
(58) *Ibid.*, p.15.
(59) *Ibid.*, p.16.
(60) Zilberman, D. *Pis'mo Y.Levade [Letter to Y.Levada]*. June 20, 1974, s.3. Zilberman Archive, 5.1.1./3.
(61) Zilberman, D. *History of Indian Logic,* in the present volume.
(62) *Ibid.*
(63) Zilberman, D. *Analogy in Western Philosophy: Introduction,* in the present volume.
(64) See Appendix 2 of this book.
(65) Zilberman, D. *Letter to Professor Kinnan*, September 12, 1974, pp.1-2. Zilberman Archive, 5.1.6./3.
The poem is translated by A.Hayes, in: *The Poems, Prose and Plays of Alexander Pushkin*. Random House, Inc., New York, 1936, p.343.
(66) Zilberman, D. *Analogy in Western Philosophy and Indian Approaches to Analogy,* in the present volume.
(67) *Ibid.*
(68) Zilberman, D. A*pproaching Discourses between Three Persons on Modal Methodology and Summa Metaphysicorum*. In: *Russia*, N 4, 1980, Torino, p.311.
(69) Zilberman, D. *The Indian Type of Cultural Tradition,* in the present volume.
(70) Zilberman, D. *O sociologicheskih predposylkah vozniknoveniya indiiskoi logiki*, ss.14-16.
(71) *Nyāya*, for instance, within which understanding is described as an imposition of properties of one thing into another thing, is apparently analogous to *Yoga*, where this attitude is lifted into a level of a mental awareness and which takes for granted that properties of one thing are imposed upon another thing. (*Advaita-Vedānta: `Śhariraka-Bhāṣyà,* in the present volume.)
(72) Phrasing the same in terms of AI theory, we can say that within classical Indian culture these analogies play a role of principal determinations, or of that fundamental prior knowledge which is discovered now (or, rather, postulated to exist) behind every significant chain of analogical reasoning. (cf. Russell, Stuart J. *The Use of Knowledge in Analogy and Induction*. 1989, pp.56-62)
(73) See Appendix 1 of this book.
(74) Zilberman, D. *Pis'mo O. Genisaretskomu [Letter to O.Genisaretskij]*. Undated, s.1. Zilberman Archive, 5.1.3./7.
(75) Zilberman, D. *The Birth of Meaning in Hindu Thought*, p.47.
(76) Zilberman, D. *Pis'mo V. Lefevru [Letter to V.Lefevre]*. April 11, 1975, s.1. Zilberman Archive, 5.1.4./6.
(77) *Ibid.*, pp.1-2.
(78) David Zilberman. *The Birth of Meaning in Hindu Thought*, p.26.
(79) *Ibid.*, p.332.
(80) *Ibid.*, p.335.
(81) "The pairs offer services to each other; share basic functions in procreation of texts; reciprocally supply means, form, and material for such procreation. Thus, for example, *Vaiśeṣikā* cedes to *Nyāya* her physics and system of ontological categories; *Nyāya* grants to *Vaiśeṣikā* his epistemology

and formal logic, two 'masculine' disciplines. *Yoga* is active as a pragmatics of 'psychism'; *Saṁkhyā* is passive in its theory. *Mīmāmsā* prudentially takes care of methodology of building the world and Reason in accordance with eternal normative injunctions of the authoritative text. *Vedānta* is a virile methodology of revelation in the text, which makes those norms manifest, i.e., makes sense of the house-hold methods, etc., etc. [. . .]" (*Ibid.*)

(82) "An attentive reader would not fail to notice that these links are by far more deep and meaningful than in a simple division of labor or distribution of philosophical roles. They penetrate into that which, in the language of Western philosophy, is called the *object* of the corresponding vision. The 'physics' of *Vaiśeṣikā* is created not because of empirical interest and can hardly be attested as a naturalist's model. It is co-opted within the authoritative text of the *Vaiśeṣikās* (e.g., in the form of their teachings about 'atoms', about 'systematically' organized relations between the whole and its parts, etc.) not as a fruit of contemplation and ordering of natural phenomena into a theory but rather, as it were, as a pretext for the *Nayāyikas* to build up their cognitive constructions; or, as it were, as the stock of 'instances' which make the logic of *Nyāya* intentional. Accordingly, the logic of *Nyāya* is built not as a formal deductive discipline but as a procedure of the reduction of the pseudo-natural objects of *Vaiśeṣikā* toward the state of the least problematic, i.e. toward a tautology of a purely cognitive construct. *Saṁkhyā* is busy with a theory of the psychic not because the psychic exists but just owing to the fact that *Yoga* pursues the program of actions, over against any theoretically suggested 'psychoses'. Hence the 'psychology' of *Saṁkhyā* is not a psychology in the natural sense but an offering of 'food' to *Yoga*. Correspondingly, *Yoga* is active in creation of the psychic, as it were to justify *Saṁkhyā*s theorizing by making it *thematic.* The writers of *Vedānta* readily confess that their lot is to fulfill the prerequisites which result in the desire to know Brahman because there exists a text where *Brahman* is mentioned as liable to knowing, and this text has come into being due to *Mīmāmsā* diligence. On the other hand, these exertions of *Mīmāmsā* are not made in vain, because the only way to knowledge lies through their renunciation of the attainment of revelation in the text." (*Ibid.,* pp.334-335)

(83) "Thus, the 'physicalist' appearance of the *Vaiśeṣik*ā philosophy did not develop, its followers pursued a 'natural empirical interest' (as happened in ancient Greek philosophy). Therefore, *Vaiśeṣikā* should hardly be called a genuine philosophy of nature, if taken *by itself* [. . .] And indeed [. . .] the non-reflective activity of *Vaiśeṣikās* give the *Nayāyikas*, the professional logicians, an endless source of material and momentum for developing their epistemological and logical constructions. In their mental work, the *Vaiśeṣikās* discovered a stock of instances', and this made the logic of *Nyāya* intentional. Accordingly, the logic of *Nyāya* was built not as a formal deductive discipline (although it includes a strong formal component) but as a procedure of reduction (*nyāya*) of the pseudo-natural objects of *Vaiśeṣikā* to the state of the least problematic, i.e., to a tautology of purely cognitional constructions: to the *forms* of logical thinking. Similarly, but in a materially different manner, the philosophy of *Saṁkhyā* deals with a theory of structured psychic events. But they do not do so because the *Saṁkhyā* theorist believes that the psyche is really existent or observable in introspection. He has to develop his theory because of the fact that in *Yoga* he is presented with a *praxis* of 'knowing' the theoretically suggested mental states. Hence, the 'psychology' of *Saṁkhyā* is not psychology in the natural sense of the word but an external form of the essential content which *Saṁkhyā* [. . .] offers to *Yoga*." (*Ibid*., pp.49,50)

(84) Zilberman, D. *Pis'mo G. Schedrovitskomu (Letter to G.Schedrovitskij)*. August, 25, 1975, p.4. Zilberman Archive, 5.1.2./3.

(85) Zilberman, D. *The Birth of Meaning in Hindu Thought,* p.48.

(86) Zilberman, D. *Pis'mo Y. Levade [Letter to Y.Levada]*. June 20, 1974, s.3a. Zilberman Archive, 5.1.1./3.

(87) *Ibid.*

(88) *Ibid*., s.2b.

(89) *Ibid.*

(90) Karl Potter (ed.) *Indian Metaphysics and Philosophy*. Princeton: Princeton University Press, 1977, pp.98, 237, 388.

(91) "*Māyā and avidyā* are no different in subject-matter. The 'ontological' image of *maya* is an indispensable (although not naturalizable) fact of *multi-positionality*, inherent in the 'six reflections'. It would be wrong to give *māyā* any naturalistic meaning and thereby to call *Advaita* a kind of 'illusionism'. On the contrary, *Advaitins* reject the idea that *māyā* is a 'transcendental illusion' in the Kantian sense of 'natural ontology' or that it is a 'world-view' of the individual epistemological subject [. . .] The world looks illusory only because the 'undivided' subject is himself a fiction in which he himself wholeheartedly believes. Thus, the *Advaitins's* invention has nothing to do with the 'world' or 'nature' [. . .] - while 'genuine' reality is found in texts produced in the process of repulsion and consumption of heterogeneous material both of the world and the world-views when taken together. The force of *māyā* is, in fact, the force of authoritativeness of an *alien* 'root' text, which cannot be accepted as a material source of genuine knowledge - and which, therefore must be understood as non-existent. Correspondingly, *avidyā* (lit. 'not-what-is-to-be-known') is neither an inherent property of misguided consciousness nor a circumstantial limitedness of the cognizing subject - who is always plagued with 'natural doubts'. It is a 'shadow' of some other cognitive reflection, hence, indeed, not 'what-is-to-be-known'." (*The Birth of Meaning in Hindu Thought*, pp.52-53)

To phrase the same differently (and to extend this thought) Zilberman writes elsewhere: " The 'root' text [or the corpse of the Vedic authoritative texts, on which its six philosophical 'visions' were directed] by every single vision is acknowledged as a seat of the extra-referential knowledge. The hierarchy of the rest in the domain of *this* vision is built under the umbrella of the 'root' text, returns to it immediately, takes a firm stand on it but does not include it [. . .] The grafting of a text over a text consists in their extension into a non-physical space, which is thus quite eliminated or alienated, that is, 'thought-off', from the very body of texts." (*Ibid.*, p.333)

Although a 'root' text is obviously considered here to be an existent reality of culture (since it was implemented in a cultural 'sur-reality'), then what seems to exist above this text, what, thus, is extra-referential with regard to this 'root text', cannot exist, either naturally, or within cultural 'sur-reality', or anywhere else except as philosophical texts themselves.

So, these philosophical texts can contain nothing except themselves, be referred to nothing except themselves, be reflected in (or by) nothing except themselves, only in their 'mutual mirroring'. Zilberman expresses this as the following: " Every Indian 'vision' springs from an authoritative text and, not being referred to any object of the natural or the artificial categories, it can be recognized as exclusive only if it is set in the place again by another text. Therefore, any Indian speculation can be mostly adequately understood as a vision out of the text and into the text [. . .] But the 'exclusiveness' thus secured is a very strange one: it can be comprehended [. . .] but it cannot be represented, i.e., depicted or referred to as a certain subject-matter domain." (*Ibid.*, p.333)

(92) "Being of a quite rigid and articulated texture [. . .], the *Veda* nevertheless existed in the immediacy of its social uses [. . .] as a text, it [the *Veda*] was not written on paper but within social human activity which it connected in a texture." (*Ibid.*, p.20)

(93) *Ibid.*

(94) Zilberman, D. *Pis'mo Y. Levade [Letter to Y.Levada]*. June 20, 1974, s.2. Zilberman Archive, 5.1.1./3.

(95) Zilberman, D. *Pis'mo O. Genisaretskomu [Letter to O.Genisaretskij]*. Undated, s.3a. Zilberman Archive, 5.1.3./7.

(96) *Ibid..*, s.3a.

(97) Zilberman, D. *The Birth of Meaning in Hindu Thought*, pp.51-52.

(98) Zilberman, D. *The Birth of Meaning in Hindu Thought*, p.338.

(99) Zilberman, D. *Pis'mo V. Lefevru [Letter to V. Levebvre]*. March 17, 1975, p.2. Zilberman Archive, 5.1.4./2.

(100) Zilberman, D. *The Birth of Meaning in Hindu Thought*, p.59.

(101) "The scheme of the projectively absolutized universe emitted by the theoretical mind was magnificently developed in the Buddhist ontologeme [ontological scheme] of *Tathagātagarbna* (*The Womb-of-the-Thus-Gone*). The universe of Productivity (Nature) was presented there as a collection of signs fabricated by an incomprehensible 'uterine device' [. . .]" (*Ibid.*, p.60). These signs, although produced, appear to be as distant from the immediacy of any existence as they possibly

could be. So, a productive process of theoretical thinking never results in anything real and existent (Nature), or even only existent ('sur-reality' of culture); its result should be only 'absolute knowledge'.

Since 'absolute knowledge' has no sign of its real existence, it cannot be characterized in any physical or cultural terms. The only possibility to grasp it somehow is by its modal interpretation - through three levels of its (intended) comprehension, of an awareness of it: "(A) Absolute knowledge, the mind at the level of absolute reality; the awareness of its being there cannot be reduced or subordinated by any other kind of awareness. (B) Interchangeable states of awareness are specific for mentality at the level of phenomenation [phenomenal appearance]; any awareness at this level can be substituted by another one. (C) Finally, one can suggest the states of mind at the level of absolute unreality; so that any awareness of that kind neither can nor cannot be subordinated by another awareness." (*Ibid.*, p.338)

These levels of a modal grasping of 'absolute knowledge' can also be described by the following signification's: (N)(norms) for (A) - deontic level; (I)(ideas) for (B) - apodictic level; (V) (values) for (C) - hypothetical level.

Again purely theoretically (i.e., speculatively, without a reference to anything existent and, thus, without a possibility to demonstrate them through certain examples) Zilberman deduces six possible modes of combination of these modal levels:

(1) $\frac{(I)N;}{V}$ (2) $\frac{(N)I;}{V}$ (3) $\frac{(N)V;}{I}$ (4) $\frac{(V)N;}{I}$ (5) $\frac{(V)I;}{N}$ (6) $\frac{(I)V.}{N}$

Now we shall identify the embodiments of these modes with the well-known six Hindu 'visions' as they can be internally perceived from their conventionally nominated positions in relation to the authoritative text. The systems and positions are:

((((((N)))))) (((((V))))) ((((I)))) (((N))) ((I)) (V) N

I	N	V	V	N	I
Saṁkhyā	*Nyāya*	*Vedānta*	*Mīmāmsā*	*Vaiśeṣikā*	*Yoga*
('Theoretician')	('Logician')	('Me 1')	('Me 2')	('Empiric')	('Pr')."

(*Ibid.*, pp.338-339)

Abbreviations for *Vedānta, Mīmāmsā* and *Yoga* correspondingly are 'Methodologist', 'Methodist' and 'Pragmatist'. It is important to recall once more that this scheme is initially invented through a pure theoretical speculation, without any empirical reference, and only later is filled by some concrete philosophical contents (although it is still doubtful whether these contents may be regarded as an empirical reference). The whole construction is called by Zilberman a 'polynomial'; he sets forth his explanation as the following: " Let us point up first the main features of this polynomial: inner reflection (symmetry), complete observance of the transactivity principle; conjugal complementariness. The bias coefficient of this polynomial is a measure of its non-orthodoxality; the most orthodox visions occupy the central part of the composition. Strictly *theoretical* to the polynomial requires meeting *Saṁkhyā* first, for her constructions have an appearance of *psychological* theorems, and 'psychologism' is the only emphatic *'universalia'* for an external outlooker. In the same connection, it seems highly symptomatic that the 'inner' *Vedanta* propounds an esoteric doctrine of 'double knowledge' while the 'outskirt' *Saṁkhyā* proposes an exoteric model of the 'spousal pair' [. . .] Besides, *Saṁkhyā* represents a connecting link between the orthodox and heterodox systems, while her partner, *Yoga*, has equally acquired universal applicability in the whole of Indian culture, and not only among the 'visions'. It can be added that both of them are probably of non-Vedic origin; essentials of their symbolism and meditative practice can be recognized in a widest variety of other cultures. In the meanwhile, *Nyāya*, which at the first glance seems so sympathetic to the Western mind in his supposed logical universality, presents by far more problems for the understanding, while the genuine comprehension of *Vedānta & Mī*māmsā most certainly necessitates naturalization within the Hindu culture, i.e., participation in everyday Hindu life, worship and ritual. Not accidentally, only *Saṁkhyā* and *Yoga* were both most widely dispersed throughout Indian civilization and never reached the level of organizational existence." (*Ibid.,* pp.339-340)

(102) *Ibid.*, p.339.

(103) Zilberman finds another confirmation of this in *Advaita*'s theory of an absolute, non-related to an experience speculation: " *Advaita* [. . .] uses a beautiful analogy of an opening and closing lotus. In the morning a lotus opens its petals, in the twilight it closes them. But this is *still the same* lotus, both opened and closed (and it may be confirmed by an outside observer). An opening is an evolution of Cosmos, an opening of vision, pure speculation. As a glance to the world 'from within'. Since this vision has nothing natural, it is pure knowledge, while everything external exists objectively, due to a pure necessity. Such a lotus' vision posits a normative order to the world to be. A vision from a lotus exists in an apodictic modality of knowledge, as an essence, while everything visible - in deontic modality of an 'ought to be'." (Pis'mo Y. Levade [*Letter to Y.Levada*]. June 20, 1974, p.4. Zilberman Archive, 5.1.1./3.)

(104) Zilberman, D. *The Birth of Meaning in Hindu Thought*, pp.57-58.

(105) *Ibid.*, p.330.

(106) "If we try to investigate the polynomial more attentively, we shall not fail to notice that its totality includes all possible absurdities of sense and violations of logical consistency which spring forth with a change of a 'vision' or, more specifically, with a transition from one system's standpoint to another. And yet, those absurdities and violations are never betrayed outside. In a sum of the proposed kind, all naturally (='epistemologically') possible (i.e., all representable, conceivable) problems are solved while those naturally unsolvable are dispersed all over the 'sum', so that the responsibility for their final epistemological status is divided and reciprocally delegated with parity among all 'shareholders'. To be sure, these 'problems' are not solvable not due to their inherent content but only due to the image of their inner organization within the 'summary' knowledge. This knowledge envisages flaws in consistency and demonstrability because it *is* heteropositional. To say the same in different wording, it encapsulates 'scheduled' conventionalities and paradoxes. On the other hand, it is absolutely consistent within the limits of each 'vision' taken separately." (*Ibid.*, p.340)

(107) *Ibid.*, p.33.

(108) Zilberman, D. *Pis'mo O. Genisaretskomu [Letter to O.Genisaretskij]*. Undated, s.1. Zilberman Archive, 5.1.3./8.

Helena Gourko

ON THE COMPOSITION OF THIS BOOK

David Zilberman planned this book to contain two parts:

(1) translation of and commentaries on the *Upamāna-Kāṇḍa* (Gaṇgeśa. The *Upamaÿna-Kāṇḍa* /Chapter from tetralogy *Tattvacintāmaṇi*/ (translated by D.Z.), Commentary to the *Upamāna-Kāṇḍa* by Vidyāvāgisa (translated from Sanskrit by D.Z.) (232 pp., manuscript); 'Epistemological' Commentary to the *Upamāna-Kāṇḍa* by D. Zilberman /unfinished/ (translated from Sanskrit by D.Z.) (28 pp., manuscript); 'Semantical' Commentary to the *Upamāna-Kāṇḍa* by D. Zilberman /with Sanskrit original text, English translation and definitions of terms/ (translated from Sanskrit by D.Z.) (95 pp., manuscript); and Terminological Commentary to *Upamāna-Kāṇḍa* by D. Zilberman (translated by D.Z.) (20 pp., manuscript);
(2) various interpretative texts of Zilberman, related to the problem of analogy in Indian and Western philosophical thought (translated from Russian by Helena Gourko), as well as Notes and Appendices (selected and translated from Russian by Helena Gourko). These texts of Part Two comprise the present volume.

It appears that the entire book was initially intended to consist mainly of the first part, with some applications of the Indian problematic to Western thought; later, however, Zilberman changed this design and proposed a significantly extended analysis of analogy in Western, in addition to classical Indian philosophy. Whatever his plan was, the result is that the first part was almost completed both textually and compositionally by Zilberman himself, while materials related to the second part remain mostly unfinished and uncoordinated. Clearly, it is impossible to use these materials to carry out the exploration of Analogy the way Zilberman proposed in his Syllabus for the course on Analogy (see Appendix 1). This obstacle creates significant difficulties for an editor trying to combine Zilberman's texts into a consistent book. The strategy chosen to compose the book's second part is to gather texts of Zilberman, which not only relate to analogy's problematic, but which connect it to the entire body of Zilberman's philosophizing, as well as to

clarify his general approach to analogy, and to show the different treatments of analogy both by Zilberman and by those philosophers and philosophies which he analyzes in conjunction with analogy.

The first part was too lengthy to be included in the present single volume. Initially planned as a two-volume edition this book now appears containing only the second part. We may hope that the first part will appear as a separate book. As a brief preview it is important to note that Zilberman undertakes the translation of the *Upamā na-Kāṇḍa* which is an extremely complicated and ambitious enterprise due to the highly unusual and difficult content of the text and because the linguistic gap between the two languages involved makes a precise transposition from abstract Sanskrit into more 'mundane' English almost impossible. As for commentaries on the *Upamāna-Kāṇḍa,* they include Zilberman's translation of Vidyāvāgiṡa commentaries (not available in English before) and Zilberman's own commentaries (which he planned to be of three different kinds: textological, semantical, and epistemological [Zilberman. Letter to Prof.Buitenen. Zilberman Archive, 5.2.8./1, p.1]). He did not mark his commentaries himself (except for the terminological commentary), so editors tentatively attribute these labels to his remaining commentaries. This attribution, however, does not completely reflect Zilberman's intentions and, in fact, is not aimed to do so; rather, it is undertaken as a matter of convenience for a distinction between the three.

Zilberman's texts in the present book open with his Introduction ('Analogy in Western Philosophy and Indian Approaches to Analogy: Introduction'), and can then be divided into two parts:

(1) analogy in Indian thought ('Analogy in *Navya-Nyāyạ*, 'History of Indian Logic', 'The Indian Type of Cultural Tradition', 'Revelation of Mechanism of Tradition in a Form of Grammatical Paradigms of Indian Logic', 'The Teaching of Śaṇkarā on Intuition and the Organization of Philosophical Text in Order to Perceive Transcendental', '*Mīmāṃsā*/On Certainty of Perception in *Mīmāṃsā*, 'Advaita-Vedānta Śariraka-Bhāṣya, Upadeśa-Sahasri')*;*
(2) analogy in Western thought ('Hellenic Type of 'Cultural Tradition', 'Western Type of Cultural Tradition'). Two texts placed between these parts, 'Writing and Tradition', and 'Tradition of the Idea of Man', belong to both parts and virtually connect them to each other. As for an introduction to both parts, its role is performed by the unified Zilberman text, 'Analogy in Western Philosophy and Indian Approaches to Analogy: Introduction'.

The first part of this book starts with an exploration of analogy in *Navya-Nyāya*. This piece is chosen as an introductory one for two reasons: (1) as a system of philosophical logic within Hindu *darśanas, Nyāya* presents the most comprehensive analysis of analogy; (2) the text is clearly the most complete and important in comparison to other texts on analogy in Indian thought. Notes to

this piece are also quite significant. They are taken from others of Zilberman's manuscripts, as well as from texts that he previously published, and supplied with editorial comments. (These notes, as well as editorial notes and comments to other chapters of the book, are prepared by Helena Gourko.)

Further clarification is sought by means of excerpts from Zilberman's 'History of Indian Logic'. This exploration is connected to the text, which follows, 'The Indian Type of Cultural Tradition'. Although the direction of the entire analysis may seem to be reversed (when the more general exploration on types of cultural tradition precedes the analysis of logic as part of it, while this later analysis tries to explain *Nyāya* as a summarized version of Indian classical logic), it is nevertheless relevant when applied to the problem of analogy. It shows analogy in various degree of approximation and attempts to grasp its entire cultural perspective. In addition, material discussed in all three texts is closely interconnected and presents, in fact, a unified field of analysis within Zilberman's philosophical system.

The following text, 'Revelation of the Mechanism of Tradition in a Form of Grammatical Paradigms of Indian Logic', represents a different kind of exploration of analogy. Although a link to major ideas is still preserved, analogy is analyzed in a more technical fashion. There are two major reasons why this text is included within the book: (1) to characterize analogy as inherent to any form of thinking in Indian culture, not only to its ancient form; (2) to analyze concrete types of deduction by analogy (as placed within the strategies *dvam'dvam, śamahara, bahuvrihi*).

Important strategic questions concerning analogy are analyzed in 'Teaching of Śaṇkarā on Intuition and on the Structure of a Philosophical Text in Order to Perceive What Is Transcendental'. There are several such questions: on the two physics, of nature and of language, on intuition of philosophical cognition as reverberation of different levels within consciousness, on auto-analogizing of thinking with itself, on the peculiar cognitive technics of *netivāda*, and others.

The text on *Mīmāmsā* (*'Mīmāmsā*/ On Certainty of Perception in *Mīmāmsā*) is notable for its exploration of a particular view of knowledge as a result of a preceding activity of consciousness and being, thus, of a distinctively analogical nature. What follows from this text is that thinking constructs its world of a specific super-natural content, by developing through peculiar steps of analogizing.

Advaita-Vedānta: Śariraka-Bhāṣya is distinctive for its originality, not only for the literary merit, certainly outstanding. The text is of crucial significance for understanding Zilberman's idea of philosophy as analogy and of philosophical trends as different analogies, philosophizing as analogizing and thus, thinking as a peculiar strategy of analogizing.

The following text, *'Upadeśa-Sahasri*, covers knowledge as well, but in a much broader sense. Knowledge is analyzed as the result of cognitive activity, which resembles material activity to the extent that it becomes indistinguishable from being; thinking creates knowledge as being, and this creativeness is analogical, by its nature. What is remarkable here is the analysis of the human world as the world

of a knowledgeable culture in all its concreteness, including processes of its creation and maintenance which inevitably presuppose analogizing.

Two following texts (as well as the preceding one, 'The Indian Type of Cultural Tradition', and the two concluding ones, 'The Hellenic Type of Cultural Tradition' and 'The Western Type of Cultural Tradition') combine excerpts from Zilberman's Ph.D. thesis on cultural tradition, as well as a sequence of 'Writing and Tradition' and 'Tradition of the Idea of Man'. Three major ideas were in the center of this enormous one-thousand page thesis: 'tradition', 'culture' and 'knowledge'. Although not elevated to the same level (or, rather, not mentioned side by side with them) analogy connects all of them together. Its thesis not only presents a 'generalized' portrait of analogy as correlated with culture, tradition, and knowledge; Zilberman sketches in these texts significant details and peculiarities of analogizing as applied to different cultures and cultural traditions.

The final two sections of this book consist of Notes and Appendices. The Notes combine Zilberman's thoughts important to the entire analysis, though they are fragments of texts not related to the problem of analogy. The Appendices present Zilberman's plans, and sketches on the subject of his Analogy book which, although very important, have been either left fragmentary and unfinished, or were not intended by the author to be a part of his book.

ANALOGY IN WESTERN PHILOSOPHY AND INDIAN APPROACHES TO ANALOGY: INTRODUCTION

ANALOGY IN WESTERN PHILOSOPHY: INTRODUCTION

Analogy is a real curse of Western philosophy. It is precisely this issue to which nothing essentially new has been added since Aristotle's *Prior Analytic*. Meanwhile, the entire canon of philosophical literature is based almost exclusively on analogies, examples, 'paradigms' and incomplete inductions (which resemble analogies very much). No less than content, this also concerns formal logic. If we analyze it carefully, then the stagnation (mentioned by Kant) and the obvious crisis of classical syllogistic can be explained by the fact that within the syllogistic, analogy is hidden. As one of the premises of a syllogism there should be a general judgment. However, no general judgment (except a pure tautology of the sort "the green grass is green") exists in nature. A well-known example 'All swans are white' held until the discovery of the Australian black swan. Therefore, any syllogism is a deduction from the particular to the particular. But this, according to the Aristotelian definition (I, ch.24), is the form of a deduction by analogy (or 'by means of example'). Any attempt to clarify the nature of this deduction immediately caused logic to fall into a paroxysm of interpretation, while a neighboring philosophy (an ontological type) was transformed into belles-lettres or theology.

Inductionists (like John Stuart Mill) thought that to a certain extent they 'domesticated' a 'broad' analogy and extended knowledge about it by putting analogy into the foundation of a logic of scientific discovery (the method of similarity and difference of signs, etc.). First, however, the basic Aristotelian formulation was not enriched at all by this move (since a composition of compared observations, regardless of whether similar or different, came from somewhere external, and any experiment was no more than an interpretation of a particular paradigm). Second, this attempt to reduce analogy to induction deprived analogy of even that sufficient foundation which was established by Aristotle. Although signs of similarity and difference are caught by the logic of experiment, they are still recognizably different. The only way to coordinate them is to represent them in a table of opposition. However, an opposition (because of its

duality) is susceptible to 'structuralist degeneration'. The opposing of 'right-left', for instance, looks most reliable in a form of 'left-not-left' (or, if you wish, 'right-not-right') (and this is precisely the situation for which the 'razor of Ockham', who fought against the multiplication of 'essences', appears to be especially useful). A difference very soon becomes formal, an induction rapidly expands and 'puts on weight', and an interpretation becomes senseless (since it is well known that 'left - is left', while everything which is 'not left - is not left'). (We note that Aristotle 'generalized' concrete Platonic *diairesises* in a very similar way, having transformed them into 'characteristic-not-characteristic' and having acquired in this way a mass of pseudo-problems (like 'existence') and genuine difficulties with the use of judgments). In any case when a crisis became evident, and 'paradigms' (in the terminology of Kuhn's *Structure of Scientific Revolutions*) again rose to the surface -this time in a revolutionized science of logic itself - it appeared that they could not be explained by anything except the most retrograde (and for philosophers shameful) 'psychologism' (however, Mill with his 'associationism' was the first to give an example and a 'paradigm').

Logicists (Russell and the early Wittgenstein) nearly supposed that they settled accounts with this problem by claiming a principle of similarity and diversity to be a formal rule to generate mathematical structures. Indeed, the logic of relations is not sensitive to the uncertainty of transferring from particular to particular, because the structural form of the relations 'nephew's uncle' and 'uncle's nephew' is invariant. However, this immunity of the logicists is based on their demand for the most uncompromising nominalism, i.e., indifference with respect to whether these relations are mental, linguistic, or real. Here another degeneration (initiated by Frege) had begun: a 'numerical' one. One horse and one grouse form sides of a relationship, put together into the structural form of two-ness. Further, this horse, grouse, two-ness and my article create a system of relations . . . with an infinite number of members (already this is being questionable! - but I invite interested persons to convince themselves independently) and with a very doubtful possibility to identify an invariant within this infinity. Disintegration is thereby introduced into the theory of sets with its paradoxes ('an exit' - through inductivism), into Carnap's induction (and again analogy rises to the surface) and into the logical solipsism of Ayer (which is the most reliable, because only within an egocentric universe is logical atomism, which so frightened Wittgenstein, not dreadful).

The contemporary logic of relations is not a revolutionary overturning inside the dead kingdom of classical syllogistic, but is rather a step backward from Aristotle to Pythagoras and even behind Pythagoras. The logic of finding numerical proportions (structural invariants) was the same for Pythagoras as it was for Russell. And it was used not in an intuitive way, but quite methodically. True, according to Russell it was expressed in the language of mathematics, while for Pythagoras - in colloquial speech, but for Russell language was unimportant. Let us recall how a structural invariant was defined in Russell's *Principles of Mathematics*. Musical annotation, the gramophone record, sound, the play of a

symphonic orchestra, emotional experience - all these hold in themselves an invariant structure of a musical piece, a structure which will be disclosed within any of these variants by a mathematical calculation of the relations which give structural form. For Pythagoras (according to Philolaus), the hammers ringing in a forge, the variations of a strength of tension of strings of the lyre, balancing by weights hanging on strings - this revealed the same canonical proportion: the number of the octave. It was such a joy! All oppositions and similarities within the octave appeared to be important not as such, but only in a mutual relationship. Then an unrestrained inflation of analogy began: transfer of the octave relations (that is the structural form of number) onto everything in nature, mind, and society. (And, of course, a structural theology was created, together with structural astronomy). *Everything* finally turned out to be similar to *everything else* in a complex of relations, with the structural form of octave repeated everywhere. Non-similarity was left only to the non-existent.

INDIAN APPROACHES TO ANALOGY: INTRODUCTION

It should be clarified at once that we could use the term ‘analogy’ with respect to Indian material only in a very preliminary and tentative sense. First, epistemological procedures and logical operations which we should analyze in a course of explicating the circumstances wherein the theory of analogy developed in India are very often quite different from whatever has been considered as analogy in the Western philosophical tradition. This certainly creates a methodological problem: how to identify the *foundations* on the basis of which this or that text is brought into consideration. Second, in spite of significant terminological similarity, the history of the development by different schools of Indian philosophy of the *notion* ‘analogy’ reveals a quite substantial diversity of opinions about the subject at the beginning and at the end of its development within a single school, different levels of elaboration of this notion by various schools of thought (which came into existence either in parallel or in succession) and, finally, the varying precision of a borderline, which has separated analogy from other logical and epistemological forms.

At the same time it is quite evident in the theoretical positions of the different schools of Indian philosophy (considered as a sum) that there is a deep and mutually well understood *supplementariness*; a phenomenon not known within Western philosophy. This remark fully relates to the concept of analogy and creates a *major* difficulty for our explication. It significantly deprives the very statement concerning the *development* of the notion of its meaningful sense, as soon as we see that every theoretical position should be evaluated only when taking into account its ‘envisaged’ theoretical incompleteness; any comparison of the achievements of certain schools should also be undertaken with this reservation. Even in those cases when one must deal with the polemics on analogy between different schools, it still does permit us to conclude that an increase of know-

ledge or simply a change of position within each of the schools was a result of their mutual polemics.

In this situation the normal analysis of material in a historical perspective probably does not really help. The point here is not so much the well known conventionality of dating in Indian chronology, but a situation which exists regardless of whether we arrange materials historically, with problems or theories succeeding each other, or systematically, i.e., in an expository form which presents completed conceptions of different schools; indeed we cannot conclude by simply saying: 'Opinions on analogy were developed in Indian philosophy of such and such a school . . .' Maybe it would be easier to adopt the purpose and principles of Indians themselves concerning philosophical commentary and, with them, direct all our efforts into proving that 'at the beginning it was the same as was found at the end'; and yet such a solution seems too much opposed to the requirements of the contemporary scientific method. On the other hand, to impose a general tendency of development on the material would mean too serious a distortion of the genuine status of the Indian philosophical problematic.

As a palliative we will accept a compromise settlement; i.e. in organizing material, we will follow a chronological scheme as far as possible. At the same time, we will not forget the supplementary character and essential non-reducibility of the views of the different schools concerning not only details, but in particular, with respect to our discovery of their different research approaches and, therefore different notions of analogy. This procedure means that we will not aspire to strive for an exact definition of just what precisely was called `*upamānà* - 'analogy', and this uncertainty will be retained until the very end of our analysis. At the same time we will clarify the circle of problems which appeared in Indian philosophy to be connected with a theory of 'analogy' and will point out the place which analogy occupied in Indian logic and epistemology.

The main reason for this approach to analogy, as well as to many other subjects in the Indian philosophical legacy, is that it helps maintain a situation of ambivalence: on the one hand, the development of Indian philosophy was terminated, since it solved *all* its problems, while, on the other, such closure is not compatible with the norms of contemporary scientific method. This is why for a contemporary researcher, Indian material has not only a historical but also a *paradigmatic* value, which permits us to consider the Indian philosophical problematic in the light of, and indeed together with, present-day scientific problems. This should compensate for a divergent historical groundwork of the Indian and Western philosophical traditions. We see that their communication promises heuristic opportunities, although the Indian tradition has already been terminated within itself. To put this differently, an analysis of Indian theories of analogy can be considered as successful if it changes our contemporary understanding of analogy.

Not forgetting the multi-systemic character of Indian philosophy and the supplementary relations of its systems, i.e., the absence of any general scheme of development of theoretical notions in Indian philosophy, it seems possible, nevertheless, to propose for didactic purposes the following model to provide us with better

orientation of materials on the theories of analogy in India; tentatively, we may use this model of successive theories of analogy as a foundation for periodization:

(1) 'Methodological' stage (7th century B.C. – 2nd century. A.D.);
(2) 'Epistemological' stage (2nd century A.D. – 11th century. A.D.);
(3) 'Logistical' stage (12th century A.D. – 18th century A.D.).

(1) The most distinctive feature of the first stage was a variability of the notion of analogy and, correspondingly, an absence of a marked 'terminological' function of this notion in any systematic sense. This was the point of certain ways to conduct discussions and to deal with quite vague issues of methodology in such a discussion.
(2) In order to obtain a reliable and precise fixing of the notion itself a picture of a multitude of competitive concepts of analogy within a trustworthy deductive framework was developed. The main problem appeared to be to determinate a relation of analogy within a structure of logical deduction. Having taken into consideration the inevitable presence within the structure of logical deduction of demonstrated examples, it was necessary, first, to separate 'deductive' examples from the 'non-deductive' ones, and, second, to situate the most recent examples within a procedure of discovering new knowledge and of confirming its trustworthiness as given by an immediate perception or reported as an authoritative testimony. It was precisely with respect to these questions that a division between the positions of different schools of Indian philosophy occurred.
(3) Attempts to solve these problems led to an 'epistemological crisis', i.e., to a conclusion that, on the one hand, any example in a structure of logical deduction may be presented as a 'non-deductive', i.e. as an analogical one, and, on the other, that analogy can hardly be regarded as a means of a discovery of new knowledge, at least because for any fact of an immediate perception and authoritative testimony an analogical structure and thus a deduction by analogy is formally self-confirming, as it were retired into itself. This means that from the point of view of formal logic all theoretical positions and conceptions are false (or, more correctly, 'empty', since the essence of the 'epistemological crisis' consisted of the fact that it was proven to be the mode of reduction of any notion to the status of a subject of an empty logical class), or, it means that all cognitive structures are 'circular analogies'. From this perspective, a logistic organization of these structures was created not in an epistemological sense, but rather in an initially-methodological sense: as formal rules for achieving a consensus under the condition of accepting a certain, deliberately-specified metaphysical position, which only figuratively can be considered as 'cognitive'.

As a result, the unusual role of deduction by analogy in Indian philosophical analysis appears to be perfectly demonstrated: not as a means of discovering a

new knowledge, but as a means of 'non-discovering' it; i.e., as a reduction of every fact of experience (taken not as direct experience, but as the subject of a group's consensus) to a ready-made scheme of logical, psychological and semantic principles. In spite of its apparent rigidity, this function of analogy ensured its quite sufficient flexibility; [this is so] because it was precisely the case that, several such systems of reduction, which themselves were not mutually-reducible, provided the equivalent of an 'openness' of experience in a non-systemic sense.

The major cultural function of deduction by analogy in India was interpretation of the facts of immediate perception in accordance with authoritative judgment (not necessarily religious, but also possibly philosophical, as we have already seen). Hence the cultural problematic is evidently important for our contemporary problems in the sociology of knowledge as well as in the logic of science. Since the development of the theories of analogy was terminated precisely at this level, its results have a concrete paradigmatic sense. If we agree that the strict principle of complementariness in the organization of philosophical and scientific knowledge provides the spectrum of conceptions of analogy in the Indian philosophical tradition with an inter-systemic characteristic of completeness, then the fitting together of variants discovered there, together with their solutions, may be seen as a family of paradigms for working out our contemporary problems in the sociology of knowledge, and in the logic and methodology of science. Of course, this requires a sufficiently accurate choice of subject matter and material for analysis, which, in the history of Indian thought, was one way, or another connected with the notion 'analogy'.

Part I. Implying and submeasuring

Chapter 1. Analogisms in conversation and discussion

The word *upamānà*, which later became utilized in a strictly terminological sense for indicating a certain epistemological category and logical procedure, has been used in spoken language, and fixed in ancient texts as early as in the 7th century B.C. where it reproduced a variety of not very clearly distinguished meanings, such as, 'similarity', 'comparison to something well-known or indisputable', 'submeasuring' (gradually approaching a known model), and 'implying', etc. Although one can see here only an unconscious linguistic utterance, it is not without interest to try to understand the contexts in which this word (or words close to it) can be found; this is because even after determining a logical problematic, theoretical activity of different schools was still kept within the same lexical boundaries: only methods of the dismemberment of semantic forms have been changed.

In *Mahābhārata* (Vanaparva, Ch.132-134) a sage Ashtavakra is mentioned; the time of his life is approximately the second third of the 6th century B.C. An indispensable part of any dispute organized at that time in a rajah's palace was the answering of riddles and the guessing of conundrums.

"Djanaka, the King of Mithila, once delivered the following speech in order to verify the quick-wittiness of Ashtavakra:

- Only that [person] can be regarded as a sage who recognizes: that which has 360 spokes, 12 parts, with 30 details in each of them, and 24 joints (i.e., 360 days, 12 months, with 30 days in each of them, and 24 full moons and new moons).

Ashtavakra, having fully understood the meaning of a *likened*, answered: "Let the eternally moving wheel (i.e., Sun), which has 24 joints, 6 hubs (i.e., seasons, according to Indian calendar), 12 rims (i.e., signs of Zodiac, or months), and 350 spokes (i.e., degrees, or days) protect you!"

Djanaka asked: "Who are those two Gods that are *likened* to two horses harnessed to a chariot, that are always inseparable, and that are impetuous as falcons?"

Ashtavakra answered: "Let God protect you, King, from the appearance of these two (a lightening bolt and a clap of thunder are implied) in your house - let them enter and come to the house of your enemy. They belong to that [being] whose coachman is a wind (i.e., to a cloud)."

Astonished by the quick-wittiness of Ashtavakra, the King was silent for a moment and then exclaimed:

"Oh, you, who possesses a divine omnipotence, are you a man [or a God]?"

As you can see from this example, the rules of this game with 'likening' demand an indispensable departure from an immediate demonstration of an implied object (this was not always dictated by sacral reasons). A disputant who was unable to continue a chain of likening (*upamāna-yukti*) and was forced to name a thing directly (thus substituting by this a means of cognition) was declared defeated. An analogical structure is perhaps hidden not just in one riddle, but in a chain of them; if so, it is because a substantive content of a chain of riddles is a transposition of indications (of course, without any attempt at their ontological identification/equation). This structure can preserve a certain independence only when an immediate indication of a perceived object is absent. Certainly, this structure is not recognized on a conscious level, but precisely in this a main knot of discussions of the definition of analogy, which became so fashionable twenty centuries later, is hidden. This idea is also of no less importance for clarifying the function of an 'example' in logical deduction (where it has been demonstrated) and of a 'model' in analogy, where its ontological status is quite dubious (perception or association?).

Such a transposition of indications of non-demonstrable objects is a typical trick not only in intellectual play, but also in the philosophical discussions of that time; discussions which were centered around the metaphysical problematic of the early *Upaniṣads*. [1] Quite remarkable is the mentioning of a sage Dattatreya (about 650 B.C.?) who explicated a concept of transmigration of the soul and that of liberation by analogy with a tree. An identification of a corporeal object with 'I' or its perception as something 'mine' is a bud of egoism in a soul, a germ which grows like a bud of a tree which brings fruits of pleasure and suffering. A person who does not grow a tree of egoism inside oneself, is free

forever. In *Markandeya-purāṇa* (16-12) where the same tale has been reproduced, a way of explanation by means of 'likening' is called 'philosophical' and is opposed to a 'scientific' (*śāstrika*) proof which is based upon the demonstration of an object (whether this object is a property or a relation), not upon the transposition of certain properties.

Still, a fixation of the term *upamāna* in a specific utterance first occurred not within philosophical literature, but within scientific (or close to it) literature, namely, in medical treatises. Although the first terminological utterance of *upamāna* as a form of logical argumentation is presented in *Arthaśāstra*, an economic-political treatise by Kautilya (about 327 B.C.) where a list of specific notions of the so-called '*tantra-yukti*' (or 'forms of scientific argumentation') is cited in a last chapter, there are many reasons to presuppose that this list has been borrowed from certain medical books which did not reach us. This seems to be more the case because the same list has also been reproduced in significant details in two medical treatises: *Charaka-samhitā* (Ch.XII, I A.D.), and *Suṣruta-samhitā* (Ch.LXY, I AD, or a bit later). Of the 32 terms for '*tantra-yukti*', which relate to the methodology of discussion, the 12th one is listed as 'analogy' (*upamāna*). However, its definition has not yet been given there.

Although a contemporary analyst would certainly find it important and symptomatic that a reflection on the analogy of a peculiar method of reasoning and cognition was initially undertaken within a scientific (or proto-scientific) sphere and not within a field of philosophical speculations, the difference between these two is not that dramatic, if he were to take into account a structure of knowledge common for the whole Indian culture.

There is no doubt that Indian medicine achieved a striking success in topographical anatomy, physiology, surgery, pharmacopoeia, and diagnostics. An observation was made and an experiment conducted on a very sophisticated level. Detailed rules explaining how to find symptoms, how to connect them to each other, how to judge (according to indirect indications) non-perceivable processes and possible consequences of this or that way of treatment, were developed there. At the same time, the very existence of many schools which often competed with each other led to a peculiar methodology of medical consultations; their goal was not only to achieve a consensus on what symptoms should be regarded as meaningful for diagnosis and treatment, but also to reduce immediately-perceived indications to authoritative judgments of representatives of different medical traditions. As we see, in medicine, as well as in philosophy, analogy acquires, from the very beginning, a twofold function: (a) a way of transposition of indications and of a hypothetical-deductive identification of immediately-perceived and implied within scientific knowledge; (b) a method of annihilation of a possible element of novelty as applied to what is considered as an what is immediately-perceived, by way of its equation with authoritative judgments of this or that school. In fact, this is the same structure of knowledge that appeared and was first fixed in methodology of discussion of religious texts as sources of authority, which had to be brought into line with data of immediate experience.

In any case, even if an ambivalence of deduction by analogy was paradigmatically fixed in medical practice first, it received its formal treatment [processing] within the purely logical tradition of *Nyāya*. One can notice there a tendency to reduce analogy, when taken in its first function, to a structure of logical inference, and [when taken] in its second function, to a rhetorical figure, or a metaphor.

In *Charaka-samhitā* (Sutrasthana, adhya 1), however, one can see a list of categories which should be analyzed within any discussion (*vāda-mārga*); among them a five-members form of logical inference, which structure contains analogy, is mentioned.

"(9) Demonstration (*sthāpana*) -formulation of proposition (*pratidjñā*) within inference, by means of example, its utilization and conclusion, for instance:

(I) Soul is eternal (proposition)
(II) because it is not created (foundation)
(III) like a space which not being created is eternal (example);
(IV) soul, like a space, is not created (utilization);
(V) therefore, it is eternal (conclusion).

(10) Counter-demonstration (*pratiṣṭhāpanā*) -formulation of a counter-proposition, for instance (counter-assertion):

(I) Soul is not eternal (proposition)
(II) because it can be cognized by senses (foundation)
(III) like a pot that is cognized by senses and is not eternal (example);
(IV) soul like a pot is cognized by senses (utilization);
(V) therefore, it is not eternal (conclusion).

* * *

Example (*dṛṣṭānta*) is a thing with respect to which an ordinary person and an expert have the same opinion and which describes a subject, for instance, "hot like a 'fire'", "immobile like 'earth'", etc., or similar to that connotation which 'Sun' acquires in texts of *Saṁkhyā* (namely, to that of a 'lamp')".

It is quite easy to notice that 'example' in a structure of logical inference from the very beginning is understood not as something not graspable by a regular perception, but as a subject of convention by/with authority.

Here a first definition of 'analogy', or, more precisely, of 'analogue' (*aupamya*) has been presented -as a subject to/of 'likening':

"This is knowledge of a thing received from the perception of its similarity to another thing."

An attempt to determine a status of 'example' within a structure of logical inherence was developed in a direction to separate 'unquestionable' (i.e., deductive) examples from 'dubious' (or 'analogical') examples. In that time, i.e., in a period immediately preceding the creation of the *Nyāya-sutra* (1st century

B.C. – 1st century A.D.), a cognitive reevaluation of the term *nyāya* as an object of logic had been undertaken. This re-evaluation was followed by a distinction of two ways to understand analogy: (1) as included in a structure of logical deduction, i.e., as linked to a demonstrated example and signifying a procedure of finding a model for 'likening' (*upamāna*); (2) as not included in a structure of logical deduction and thus performing a function of illegitimate (in a strictly deductive sense) 'homological' deduction ('*uttara*', comp. *Charaka-samhitā*, 380), or an 'exceeding' (*j ati*, lit. 'something of that sort').

The word *nyāya* means a 'rule', 'setting up as a model', 'logical deduction'. Together with the development of logic the latter understanding gradually replaced the penultimate one, i.e., the analogical structure has been replaced by a deductive one (comp., Vasyayana, *Nyāya-bhāṣya*, I-I-I). Thus, it can be claimed that the term *nyāya* entered a literature not earlier than in 1st cent. A.D. Panini (about 350 B.C.) did not use the word *nyāya* other than to mean 'setting up as a model', 'likening to a model', 'citing an example'. The same sense was dominant in the texts of his commentator, Patandjali (about 150 B.C.). Kautilya in *Athasastra* clearly meant 'analogy' when he used the word *nyāya* (*adhikaraṇa* II, adhya I). The first attempts to use the word '*nyaya*' in a definition of deductive logic were undertaken in *Mahābhārata* (*Adhiparvan*, adhya 1, verse 7, adhya 70, pp. 42-44, *Shantiparvan*, adhya 1, verse 7, adhya 70, pp. 42-44, adhya 210, p.22), *Viṣṇu-purana* (part 3, adhya 6), *Śāstya-purana* (3-2), *Padna-purana* (*Uttarakāṇḍa,* Ch.263), *Yājnāvalkhya* (1-3). All these texts relate, as it seems, to a period B.C. In the mentioned above *Charaka-samhita* (*Yastva-sthāna*, adhya 8) the word *nyāya* is used in the same sense, i.e., to describe deductive logic.

Having abstracted from a contradictoriness of example (the first step toward a deduction by analogy), the ancient Indian logicians began to analyze a logical deduction separately, as if a question about a certainty of example utilized there [within logical deduction] was already unanimously solved and analogy (*upamāna*) was interpreted as belonging to an *epistemological* field where, for knowledge of a thing (prototype) as received from perception of its similarity to another thing (model), connections with cognition (through immediate perception, empirical aspect of analogy) and knowledge from a word of authority (semantical-apologetic aspect of analogy) have been looked for. In that way, quite a narrow field was pointed out and analogy as an epistemic category acquired the most modest and disputable position (as compared to other categories). In any case, its independence and value was often called into question. At the same time, those examples which became useless for logical deduction, i.e., were regarded as logical mistakes, also had a form of transposition of indications. This field of 'homologies', in fact, also belongs to a deduction by analogy, though not to that of a deductive or epistemological orientation, but of a methodological orientation. Although a falsity of such likening is quite clear, it still has to find its place and function within a structure of reasoning.

Thus, with a completion of the 'methodological' stage of the development of the theory of analogy, as well as the transference to the 'epistemological' stage

(within certain philosophical systems), the status of analogy, in spite of a fixation on the term itself was still ambivalent and unclear. Even in *Nyāya*, where *upamāna* was claimed to be an independent epistemological category with its own problematic field, part of its content was related to a theory of mistakes within logical deduction, while the methodological and ontological problem of a borderline between the subject of *analogy* and the subject of a *logical mistake* was still not solved.

EDITORIAL NOTES

(1) In another unidentified fragment on analogy, apparently, a part of a version of this text, Zilberman extends this remark to early *Upaniṣads*: "About the latter, as about Plato's dialogues one can even claim that all its philosophy is only analogy, and examples are so numerous, that it seems unnecessary even to cite them. Perhaps, it would be useful, for purposes of a further discussion, only to distinguish two types of identification: an immediate one when elements or indications of a prototype are identified with elements and indications of a model by way of a direct metaphor (this is an 'organic' analogy, according to the wide-spread ancient idea about correspondence between 'microcosm' and 'macrocosm', or between the subject of knowledge and nature) and 'omophonic' one when etymological identifications of denotats (similarly sounded words) are undertaken. Omophonic identifications are quite common within archaic cultures." (Fragments on Analogy. Zilberman Archive, 2.6.1., p.8)

ANALOGY IN *NAVYA-NYĀYA*

In the manuals of logic (*nyāya-prakaṇa*) starting from the compendium of Bha-sarvadji (about 950 A.D.), an understanding of analogy as 'analogue' ['generation'] (*jāti*), i.e. as a mistaken likening, disappears. What is kept is its interpretation as one of the *pramāṇas*, i.e. as a variety of means for obtaining a true knowledge.

While listing four epistemological categories in his *Tarkabhāṣya* Kesava Miśra (about 1275), defines analogy as the following: "Likening to a model or analogy (*upamāna*) is knowledge of a certain thing as similar to another thing; [this knowledge] is deducted from a recollection of a prototype proclaimed earlier. Suppose, for instance, that someone has heard from a forester that *gavaya* is similar to cow and then goes to a forest and sees an animal similar to cow. By remembering the words of the forester, the person becomes completely convinced that the animal in front of him is a *gavaya*. This knowledge is analogous to or a likening of a model because it is attained by means of analogy or a comparison of a model." (*Vidyābhuṣana*, 357)

In the Section on Submensuring, Book III in *Tattvachintā maṇi,* Gaṅgeśa Upadahya (about 1200) [wrote about] someone who does not know the signification of the word *'gavaya'*, after as elder has told him it means an animal similar to cow. This person subsequently goes to a forest where he sees an animal similar to a cow. Remembering the words of the elder [person], he establishes a comparison resulting in the conclusion that animal in front of him is an object signified by the word *'gavaya'*. A means of cognition which helped the person reach such a conclusion is called a similarity [likening] to a model (*upamāna*). Such a means produces knowledge of similarity between cow and *gavaya*. The word 'similarity [likening]' is used here to designate the entire process of inference by analogy.

The structure of the operation (*vyāpāra*) in the case of a comparison consists of remembering the instructive statement of the elder [person], namely that the word *'gavaya'* signifies an animal similar to a cow. The result of the comparison (*upamiti*) is knowledge of the connection of a name to something thus named.

Mīmāmsākas proclaim that similarity (*sādṛṣya*) is a specific object not included in the seven categories of *Nyāya*. According to them [*Mīmāṃsākas*] *'gavaya'* can be defined as an animal similar to a cow. Gaṅgeśa considers such a claim confusing and therefore rejects it. One can say that a certain thing is similar to another thing, whereby possessing a specific property of the latter, the 'certain thing' is different in an inheritance relation. After defining similarity in this way, we can assume that there is an infinite quantity of cases of increasing similarity between these given things and their prototypes. According to Gaṅgeśa, the correct denotation of the word *'gavaya'* is not an animal that possesses a similarity to a cow, but an animal which possesses a nature of *'gavayaness'* (a prototype of all *gavayas*). Therefore, the result of an analogy consists of knowing a relation between the word *'gavaya'* and the animal that possesses an inheritance nature of *gavayaness*.

Some say that knowledge of the denotation of the word *'gavaya'* is deduced from perception. This is nonsense. Although a relation between the word *'gavaya'* and the animal named *gavaya* may be perceived immediately, by catching someone's eye, it is impossible to perceive such a relation in all other cases, [especially in those cases] which do not catch someone's eye. Therefore, knowledge of the denotation of the word *'gavaya'* is not deduced from perception, but is [obtained by] a specific means of perception called *upamāna*.

Knowledge of the denotation of the word *'gavaya'* cannot be obtained by means of logical inference, because, in the case of likening, this knowledge is deduced from knowledge of similarity, independently from the existence of an invariable concomitant indispensable for deduction. Furthermore, in the case of knowledge [obtained] by means of similarity and comparison we always reflect through our self-consciousness in the form of "I compare" or "I liken", but not in the form: "I deduce".

I. ANALOGICAL STRUCTURE OF VERBAL KNOWLEDGE /ANALOGY AND SEMANTICS/

Analyzing the problems of the semantics in Book IV of *Tattvachintāmaṇi*, *Śabda-Kāṇḍa*, Gaṅgeśa touches upon the analogical structure of verbal knowledge. He claims that a particular relation of *indication* (*vṛtti*) exists between a word and a thing signified by this word. Precisely because of this relation, we recall a thing known as a 'jug' after hearing the word 'jug'. This peculiar relation inherent to a word is usually called its *potentiality* (*śakti*). Quite often, however, a more detailed distinction is made, with a division of this peculiar relation into two forms: (1) signification (*saṅketa*), and (2) implication (*lakśaṅā*). Signification is further divided into (a) permanent and (b) occasional. Permanent signification inherent to a word is called *potentiality* in the strict sense of a word. This potentiality, which, as such, is the ability of a word to make a synopsis of a certain thing (i.e. to produce its recollection), depends

upon the will of God; this reveals itself in a form: "Let that thing be recognized through that word". In this case, God appears to be the instructor of *upamāna*. A word is named a 'specialized' one if it causes a recollection of a certain thing and is subjected to human will. For instance, the word *nadi* is a specific word - a model for conjugation of all the names with the ending 'i' which can be conjugated analogously. The difference between a permanent and an occasional potentiality of a word is not taken into account by logicians who think that words acquire their potentiality (denotative potential), not because of the will of God, but because of the will of people. In their opinion, a specific word contains the same potentiality as an ordinary word. The potentiality of a word is certified by the following sources:

(1) grammars (*vyākaraṇa*); (2) analogy (*upamāma*); (3) dictionary; (4) expert opinion; (5) usage; (6) context; (7) description; (8) association.

Every word, therefore, has potentiality that depends on the will of God or people. Does it relate to the universality of a thing or to a unitary thing? *Mīmāṃsākas* say: "If to assume that potentiality relates to a unitary thing, it becomes necessary to admit an infinite number of potentialities. If it relates to a universality of a particular thing, we have only one potentiality which embraces potentialities of unitary things as well." Gaṅgeśa argues against this opinion, saying that we cannot identify individualities if they do not contain potentialities; but this does not mean an infinite number of potentialities (because all the individualities related to the same class have the same potentiality). Therefore, potentiality relates to elements that create classes.

"Knowledge of a thing is acquired from its similarity to another thing": /Vidyābhuṣana, 24.32-33/

In the period immediately preceding the creation of *The Nyāya-Sūtra* /1st cent. B.C. - 1st cent. A.D./ the notion of *nyāya* was significantly reconsidered. It led to a clear distinction of two ways of the interpretation of analogy: (1) as belonging to a structure of logical inference, i.e. as connecting to a demonstrated example and signifying operation of likening to a model (*upamāna*); (2) as not belonging to such a structure and thus becoming an illegitimate (in a strict logical sense) analogue (homologue) *jāti* - literary 'something of that kind'.

II. THE COMMENSUREMENTS OF KNOWLEDGE AND COGNITIVE PROCEDURE OF 'SUBMEASURING'

In *The Nyāya-Sūtra* (composed by Aksapada-Gautama about 150 AD at the latest), analogy (*upamāna*, 'Submeasuring') is quite clearly indicated as one of four sources (or means) of reliable [trustworthy] knowledge - along with Perception, Aftermeasuring and Testimony. According to *Nyāya*, 'knowledge' appears to be a system with strictly fixed structure. Two major characteristics are always inherent to this structure: its revelation *only* with respect to some-

thing different, and its measurement with respect not only to knowledge, but to something different as well. In other words, explanation of knowledge is [hidden] in something different, in 'non-knowledge'; the same is with measurement.

As for a form of knowledge itself, this [something] 'different' appears to be a special means, which helps to create knowledge as such. Such a means is defined in *Nyaya* as operation, which produces knowledge's construction in the form indicated above. The technical name for a complex of such procedures is Commensurements (*pramāṇas*). A procedure of measuring a certain thing does not, of course, transform this thing into knowledge; it provides, however, an accurate and definite [concise] knowledge about it. It is precisely this aspect that is reflected by the assertion that knowledge can be revealed only with respect to something else and that it therefore contains a commensurability of 'something else'. The epistemology of *Nyāya,* therefore, is based upon a strictly constructive principle: cognition is the creation of a certain construction: commensuration of a certain thing.

This constructiveness, in its turn, could be interpreted as a certain 'existence'. Such a position, as it seems, has nothing in common with a naive ontological realism. This appears to be even more certain if we consider yet another appearance of the interpretation of knowledge of (or as) a thing in *Nyāya:* a construction similar to the creation of a thing. The *Nyāyaikas* are unanimous in their assertion that in constructing their 'knowledges' they manipulate things, not propositions or judgments. But they go much further and claim that 'logical' cognitive constructions (for example, *avayava*, or structure of inference) are *things as well* (not just elements of a certain language used to describe their proper logical manipulations with things of 'the first order'). Such an assertion obviously comprises an ontological predicament and becomes a distinctive mark of '*super-realism*'.

Although the *Nayāyaikas* are quite persistent in claiming that their cognitive constructions, or simply 'knowledges' (*jñānani*), are *things*, they deny, at the same time, the reality of these things 'in-themselves'. Their 'knowledges' are explainable 'from without' (*parataḥprakaṣa*) and commensurable 'from without' (*parataḥprāmāṇya*) as well. Such an interpretation becomes possible because of a specific comprehension of the knowable [cognitive] things in *Nyāya:* 'knowledges' are understood not as things of 'the first order', but as things created, constructed through a complicated set of cognitive procedures. Certainly, many riddles and mysteries of *Nyāya* come to their end if we interpret *Nyāya* not as a realistic but as a constructivist system of knowledge. In other words, its 'knowledges' are not knowledges of the world as *it is* but, rather, of the world as it *ought to be*. Such interpretation is tantamount to keeping two *axiomatic* requirements for the knowledge mentioned above: explainability, from outside, and commensurability, from outside as well. As a matter of fact, the world in which these two requirements are held together is a peculiar 'real' world of *mathematicians*, yet, constructed more consistently than in Western mathematics, i.e., without any reference to the world of experience as the existing one. (1)

Constructions of *Nyāya* can be considered as correctly built and trustworthy, not 'in all possible and conceivable worlds' (as it is the case in the Leibniz system), but in a unique world of the Highest Good, the construction (or attainment) of which is declared the ultimate goal of the *Nyāya* logic. This goal can obviously be defined as metaphysical one if we take a system of logic for 'physics' as an overtly extra-logical one. *Nyāya*, thus, is not only a system of logic; it also represents an accumulated and specifically stratified 'sum of knowledges' and, as such, constitutes its own 'body' (as well as the only possible constructed world (of *Nyāya* and by *Nyāya*)). This world, naturally, is built in the strictest accordance with the initial axioms of *Nyāya*. As for a 'validity in all possible worlds' i.e., for the problem of intentional interpretation of logical forms in an intuitive or normative experience, this necessity is excluded from the very beginning (since the 'knowledge' (or the 'knowledge-things') of *Nyāya* is neither self-evident nor self-measurable). The problem of interpretation in *Nyāya* is therefore eliminated at the expense of an original critique of experience.

This critique, however, still holds something (or, rather, someone) external or 'real' with respect to 'knowledges-things'; this 'someone' is the Self (*Ātman*) of the *Nyāya's* world-under-construction. Turned around, the Self of the *Nyāya* is real only in a sense that it represents [consists of] knowledge and as such is a growing self. The Self of *Nyāya* intends to realize (and create) the world as the world of knowledge , i.e., as explainable and commensurable from the outside, and thus to make it (bound it to) the Highest Good. Correspondingly, this Self *is* a mirror (if we consider the idea prevalent in Western interpretation of the Self of *Nyāya,* namely, as a mirror-like *Ātman*), but a very special one: a 'judging' and participating mirror involved in cognitive constructions an as element with variable meaning. Interestingly enough, the Self can first be introduced as an element of the locus relation ('sub-ject' = *adhikaraṇa*). In the following construction, however, the same meaning of *ātman* has to be found not in the locus relation (which can be demonstrated directly) but in the abstract operations of limitation (*avacchedakata*) and embrace (*paryāpti*), etc., where it cannot be identified in the immediate 'mirror-like' physicalist sense.

One may still have an impression that the natural necessity of knowledge in *Nyāya* is maintained from the very beginning. But such judgment becomes impossible precisely because of Commensurements, which postulate a constructive and supra-real nature of knowledge in *Nyāya*. As Vātsyāyana insists: ". . . Neither can anything in the matter of facts be known except through a commensuring; nor can a fruitful exertion be aroused outside known things; as it is only when an agent has cognized a thing by means of commensuring that he desires either to acquire it or to get rid of it; and this effort of an agent, stimulated by a desire to acquire [knowledge of thing] or to get rid of this 'thing known', is what is called 'exertion'. This exertion is regarded as 'fruitful' when it produces a certain result. That is to say, that when a person puts forth an exertion, in other words, wants either to acquire a certain thing or to get rid of it,

appears on a stage, his exertion becomes 'fruitful' precisely through his intention to acquire or to discard it." [24, 32-33]

So, a combination of the four procedures or Commensurements is considered in the *Nyāya* as necessary and sufficient for [acquiring] a 'knowledge's' construction. The first [procedure consists of] producing an assertion endowed with meaning (*śabda*). 'Possession of meaning' presupposes the semantic competency of a producer of this assertion, viz., his ability to testify something, as well as his expectation that this assertion will be taken into consideration. Such a procedure includes a separated analysis of meanings considered to be trustworthy.

Secondly, any meaning, proclaimed and considered to be trustworthy, has to be employed as 'evident' (*pratyakṣa*). A procedure of [proving] 'evidence' is not a criterion, but a means and cannot be entangled with Perception, even in the sense of a mechanism of Perception. Certainly, knowledge about a thing has been produced by means of perception of this thing, but Perception as such is not knowledge (because, as pointed out above, Perception becomes that 'different something' with regard to which knowledge appears to be possible). Thus, instead of a simple and unilateral relation between knowledge and a thing, we have three different relations:

(1) [relation] of knowledge to procedure [of proving] 'evidence';
(2) [relation] of knowledge to procedure [of] 'notification';
(3) [relation] of procedure [of proving] 'evidence' and procedure [of] 'notification' of both sides.

In this way the process of knowledge's construction in *Nyāya* is initiated. The first two relations have already been discussed. As for the third one, a certain rule of representing the content of 'notification' within 'evidence' has to be implanted in the very design of knowledge. In other words, something, which is notified, must become visual, be taken 'before your eyes' (which is what *pratyakṣa* literally means). It does not presuppose, however, that the content of notification has to be materialized as a sensually perceptible one. Here two other procedures of a knowledge's construction take their part of the process.

The third procedure is a 'subsequent Commensurement' (*anumāna*); what is meant by this is exposure of a logical structure of knowledge as a system with certain relations. The three relations analyzed above, plus a relation of a 'subsequent Commensurement' to other Commensurements, belong to this structure. The rules of organization of such a structure are the rules of logical deduction.

Finally, the fourth procedure, Submeasuring (*upamāna*), sometimes defined as 'identification' or, which is not quite correct, as 'inference by analogy', is employed to interpret these rules [as applied to] concrete meanings and inserted relations and, thus, to complete knowledge as a certain construction.

Submeasuring, thus, crowns the whole procedure of a knowledge's construction and ties all other operations together. (2)

This central position of Submeasuring within the commensuring procedures of *Nyāya* has been most carefully analyzed by Gaṅgeśa in the Third Part of his fundamental epistemological tractate *The Philosophical Gem of Truth* (*Tattvachintāmaṇi*). A context of discussion on Submeasirung is fairly significant, since three major parts of a dispute reproduced by Gaṅgeśa are *Mīmāṃsā kas*, old *Nayāyaikas* and new *Nayāyaikas* (represented by Gaṅgeśa himself). A subject of discussion is a formal definition (*nirupāna*) of Submeasuring.

Mīmāṃsākas assert that in such a definition Submeasuring looks like a certain action by means of which an accurate measurement (*prama*) of similarity between different things (at least, two) can be obtained. For example, if someone intends to inform another person about an unknown animal called *gavaya*, an animal, which is similar to cow, a form of his notification can be the following: "Similar to cow, called by the word *'gavaya'*". It is precisely this configuration (*akaraka*) that can be considered a specific result of a submeasuring procedure, i.e., technically speaking, [this procedure leads to] Submeasurement of similarity, [gives] a peculiar variety of exact measure as a measure of similarity between the indicated animals. However, another configuration: "'*Gavaya*' is what is called by the word *'gavaya'*" is not right, according to *Mīmāṃsākas*, because such a configuration is not a formulation of an 'exact measure of similarity' to something.

It is remarkable that the word 'configuration' or 'formulation' is employed here in a terminological and operational sense conforming to a contemporary definition of 'structure'. *Ākāra* means 'figure', 'structure', i.e., a general form specified as an invariant with respect to a particular content. *Ākāraka* can be translated as a 'configurator' or 'structure-creator'; i.e., any knowledge which can be considered as *ākāraka* and included as an element into a much more complicated relation [structure] transforms this relation into a '*structure-creative*' one. In our case, *ākāraka* "similar to cow, called by the word *'gavaya'*" is claimed to be an element included in a formal definition of Submeasuring which [by this very inclusion] transforms such a definition into a 'structure-creative' decision.

A formal example of 'a structure-creative' element in the word combination 'A tall man' [illustrates such a definition in the following manner]: 'tall' [is] a simple quality; 'manhood' [represents] *prakāraka* [which introduces] a major qualificator of this structure and, as such, maintains a certain invariant content around which different variables ('tall', 'short', etc.) can be placed. In order to be considered as a definition of Submeasuring *ākāraka* has to be presented as *prakā raka* of knowledge's construction. That is why the second configuration of *ākāraka* does not fit; it does not presuppose that the word 'gavaya' is a helpful means, a sign (*nimitta*) for considering the similarity of *gavaya* to something as an important part of the procedure of Submeasuring.

By establishing, thus, that similarity has to be defined through relations of synonymy-homonymy, i.e., by a pre-categorical utterance of words, the *Mīmā ṃsāka* claims that similarity is a specific category (i.e., 'a goal of words-

utterance', *padārtha*), which does not fit into the system of the seven *Nyāya* categories: quality, action, community, particularity, similarity (continental), and absence.

It can be proved by the assertion that similarity is something *existent*. But, at the same time, it [similarity] does not fit to any of the categories: it is quite possible to discuss similarity of everything to everything, as well as it becomes pointless to consider whether such similarity is 'good' or 'bad', if the case of [claiming] uniqueness of similarity [i.e., of discovery of unquestionable similarity] is concerned.

Without reproducing the entire *Mīmāṃsāka* position (analyzed in the previous chapter) let us present the argumentation of the Old *Nayāyaikas*. So, the Old *Nayāyaikas* object: - Yes, but 'similar' is either present or absent. Something present either possesses a [certain] quality or is not endowed by [this] quality. The latter is either located or not. A location of something can mean possessingness of generality, otherwise it is non-generalizable. Something possessing commonality may have changeability or be invariable. Qualityless, a non-generalized and localized [something] can be characterized as possessing either one position or many. Therefore, 'similar' can be included into this or that category of *Nyāya* anyway.

But this [inclusion] still cannot be undertaken, because of the non-acceptability of notification. The very placement [of similarity] inside any of the *Nyāya* categories listed above depends on the possession of the same substance's quality and the other three, (namely, generality, particularity and inclusiveness); all this becomes possible when an alternative of another type than the given one (i.e., a non-inclusiveness) is considered.

The *Mīmāṃsāka* himself starts his argumentation with the assertion that similarity is something existent. This has been presupposed by the possibility of an unhampered notification [of similarity]: a non-existent [something] cannot be discussed in this way. But if similarity does not belong to any of the seven categories because of a non-acceptability of its notification [naming], it simply does not exist for the *Nayāyaika*. This is the only alternative. Everything which falls out from the categories can obtain a knowledgeable explication only inside these categories as within something different and can thus be measured by them as by something else.

This is why [the *Nayāyaika*] states the following: "A particular similarity means possessing many characteristics which fit this particularity, but which are different than the conjointly-possessing [i.e., belonging to the other cases of similarity as well] characteristics." Here a formally-defined is what has the same foundation for any kind [of similarity?], etc., and, together with a non-componentness of division, appears not to be determined [defined] by many characteristics fitting this [similarity]. Meanwhile, what can be formally-defined as something different is only this [different]; and thus a counterbalancing of this particular [similarity] is created. However, in your [the *Mīmāṃsāka's*] 'similarity' only that (but not 'that and this') creates a counterbalancing, with respect

to, and, thus, by no means, possessing a certain limit by something divided, lengthened, etc., as prompted by the possibility of the following proposition: "Similar because of something". In addition a multitude, i.e., obtaining a foundation for three or four, etc. [entities, similarities?] - is not what does not follow.

The Old *Nayāyaika* asserts that similarity is something existent because it is defined as possessiveness of many fitting characteristics by two compared things. This is so, however, only if the qualities of compared things which are specific to each of them correspondingly, i.e., are 'not-conjointly-possessed' [by all compared things], cannot be [listed as] these [fitting] characteristics. 'Non-conjointly-possessing' characteristics of both compared things determine the limits of the existence [stretching?] of a presumable similarity. That is, the existent similarity can be determined in its depth and fullness within these indicated limits.

It may still be interpreted that our formally-defined [similarity] (since it is considered as something existent) is based on conjointly-possessed characteristics of a certain kind, under the condition of a non-inclusion of dissimilarity [difference] and that, moreover, our formulation creates an impression of [speaking about] the possessiveness of many characteristics which fit [this] similarity, but not a determination [of the admittance of this very similarity] by the essence of similarity as such. Only similarity of something different than what is defined by a genre is [something which creates] conjunction to a relation which presupposes similarity.

That is, a similarity to a cow is defined according to the generalization of some fitting characteristics of cow. However, possessing certain qualities by something named *gavaya* does not depend upon the similarity between *gavaya* and cow. A similarity collected from the characteristics of cow is correlated not to the cow but to the something named *'gavaya'* and is not determined by its dependence upon cow. Precisely this circumstance makes a subject of this definition appropriate (since it contains conjunction with regard to similarity); whereas in the *Mīmāṃsāka's* definition a member of relation becomes '[something] similar to cow'. This does not presuppose certain limitations of a definition (i.e., excluding of cow itself) or divisibility (cow and non-cow) or length, etc., which can be proved by the statement: "Similar, because of something'. Furthermore, if 'similar' appears to be a combination of different elements (several objects or parts of objects) it would not follow that such a combination cannot be explicated as fitting our formulation. (3)

III. *UPAMĀNA* AND *JĀTI*

There has yet to be a clear distinction between *jāti* ('something-of-the-kind', analog) and '*uttara*' ('objection') or *hetvabhāṣya* ('mistaken foundation'), as well as '*ahettu*' ('absence of foundation') in *The Charaka-Saṁhitā* . In *The Nyāya-Sūtra,* analog is interpreted as an 'empty objection', i.e. as an objection not based upon a demonstration of instance. All these notions were singled out as elements of the discussion, but particularly acquired a special sense in *The Nyāya-Sūtra*.

It is therefore important to emphasize two ways of understanding analogy: as included in logical inference (and linked to 'demonstration of instance [model]') and non-included, when its non-demonstrativeness is sufficient grounds for recognizing a disputant (who brings it forward) as defeated in the discussion.

Upamāna ('likening to a model') is defined in *The Nyāya-Sūtra* as knowledge about [some]thing according to its similarity to another thing. As in the example of the gavaya and the cow mentioned before, someone who sees an animal which looks like cow makes a comparison and then draws a conclusion that the animal in front of him is a gavaya. Such an analogy is based on comparison.

'Instance' (in logical inference) or *dṛṣṭāntà* (literary '[something] for seeing, introspection') is a thing about which both a commoner and an expert are of the same opinion. As in the assertoric utterance, "Where there [is] a smoke, there [is] a fire", an instance with a kitchen stove will convince both a layman and an expert. Instances can be 'homogeneous' and 'heterogeneous'.

'Analogue' (*jāti*) is an objection based on an analogy; this analogy, however, is too distant, in contradistinction to a genuine analogy. It [this understanding] also presupposes an understanding of similarity and dissimilarity.

The disputant [claims]: The soul is inactive, because it is all-pervading, in the same way as the sky.

Objection: If the soul is inactive because of its resemblance to the sky as all-pervading, why not recognize it [the soul] as inactive because of its resemblance to a kitchen pot as resting upon [sitting upon] this place.

This objection is empty because it is based on analogy that is too far fetched. Indeed, it does not take into account the distinction between major and medium terms [of inference]. The sky is inactive because it is all-pervading; a pot, however, may not always rest at the same place."

Or:

Disputant: Sound is not eternal because, in contradistinction to the sky, it has been created.

Opponent: If sound is not eternal, as an effect of effort, it is not similar to the sky; why then not admit that it is not eternal due [to the reason] of being an object of hearing perception which makes it different from a pot?

A foundation of the opponent's objection is empty because the analogy is too distant and does not consider the absence of a link between major and medium terms. There is no connection between 'creation-ness' and 'non-eternalness', but the same [assertion] cannot be categorically made about 'object of a hearing perception' and 'non-eternalness'. (4)

IV. GROUPINGS OF *JĀTI*

Literally this word [*jāti*] means both the process and the result of generation. Its use in a system of knowledge is divided between two terms with opposite meanings. One of them is 'genus', considered synonymous in its indications to a

category of commonness (*sāmānyam*); another meaning is 'futility', 'false analogy', i.e., something indicating a groundless generalization, an incentive to involve a reckless disputant into a futile discussion.

According to S.Vidyabhuṣana, the term *jāti* in the sense of 'analogue' or 'futile rejoinder' has not been utilized in any work anterior to *The Nyāya-Sūtra*. When, however, it was introduced there it also incorporated the meaning of '*ahetu*' ('absence of motive', or 'non-motivated groundless') as in *The Garaka-Saṁhitā*. This means that the division between logic and sophistry was finally demarcated only *in The Nyāya-Sū tra,* though when this division was finally demarcated its argumentative function became synthetic. One of the components here is a positive rejoinder as grasped by sophists, the other is a negative logical fallacy, as viewed from the logical point of view. This fact is epitomized in *The Nyāya-Sū tra* by *two* correlative but different 'categorical means' (*padā rtha*):

1.2.4. *saviabhicāraviruddhaprakaraṇasama sādhyasama kālatītā hetvābhāsāh* - Fallacies of reason (lit., 'apparent, seeming grounds') are erratic, contradictory, equal to question, unproven, and mistimed. They are such when viewed from the subjective point of view, i.e., when a *formal* structure of knowledge is considered.

1.2.18. *sādharmyavaidharmyābhyāṁ pratyavasthānām jātih* - Futility consists of offering certain objections founded on both similarity or dissimilarity, and are such when viewed from the objective point of view, i.e. when the content structure of knowledge is considered. The content of *jātì* is revealed by counterposing two different opinions that vindicate both similar and dissimilar properties (of an implied object of comparison).

Both '*jāti*' and '*hetvābhāsà* are, of course, singled out as two different sides of a matter of discussion (*vāda*, 'speaking about'), and all three are listed among sixteen categories indispensable for attaining the Highest Good (*The Nyāya-Sū tra*, I.I.I).

The Dialectics of Nyāya unfolds as follows:

The sixteen categories are first divided into a subjective part, needed for formulating logical truth (first nine categories), and second, an objective part, responsible for knowledge accumulated within a discussion (remaining seven categories).

If a correlation between a means of right knowledge (*pramāna*) and an object of right knowledge (*prameya*) is not attained, it brings in the issue of doubt (*saṁsaya*) and implies a scrutiny of the very purpose of applying means of right knowledge (*prayojana*) ascertained by the introduction of a familiar instance (*dṛṣṭānta*). The content of such an instance is selected by considering a certain tenet or theory (*siddhānta*) already established and is aligned by an inferential structure (*avayava*) as part of a logically consistent knowledge. What follows is the confutation (=*reductio ad absurdum, tarka*) or ascertainment (*nirnaya*) of a subject under discussion in one of the logical configurations, depending on the kind of mediation by an applied instance.

With the formal part being over, the matter of discussion (*vāda*) becomes the object of scrutiny (see *The Nyāya-Sūtra*, Book I, Chapter II). Since the subject of our interest, i.e. *jāti*, is located precisely there we will follow this procedure in a more detailed fashion.

This 'discussion' overlaps with the 'logical' part of sixteen categories and starts, quite predictably, from a 'doubt': [what would happen] if ascertainment fails at this point? Hence discussion is to be continued; such categories as purpose, instance, established tenet, inferential structure, confutation and ascertainment should be a part of it: what is of interest now is their *objective* content, rather than subjective logical form. According to *The Garaka-Saṁhitā* , once a logical criterion is sublimated, components of the discourse, alongside with the discussion, include wrangling (*jalpa*) and cavil (*vitandā*), i.e., pure sophistry mixed with verbal dialectics. But the subject of discussion (*vāda*), as treated in *The Nyāya-Sūtra*, is established as representing *sambhāsā -vidhi* ('method of debate', lit., 'arrangement of talking-together'). The subject of *vāda* includes the following categories: analogue (*jāti*), fallacy (*hetvābhā sa*) and the point of defeat (*nigrahasthana*). *Jati* precedes *nigrahasthāna*, because, after the futility is exposed, the acknowledgment of defeat follows immediately. This is achieved through the segregation of *jāti* and *hetvābhāsa* by *ochala* (quibble).

Now let us discuss definitions.

1.2.1. *prāmanatarkkasādhanopālambhassiddhāntaviruddhaḥ pancāvayava-papannaḥ paksapratipaksaparigraho vādaḥ* – Here a discussion embraces one of two opposing sides, presented by five members (of the structure of logical inference), and is not opposed to the established tenets, apprehended by such establishing means as instruments of right knowledge and confutation.

A *dialogue* or disputation (*kathā*) is the adoption of a certain side by a disputant and the opposite side by his opponent. If the ascertainment of truth is focused on performing, discussion (*vā da*) is singled out, and *wrangling*, which aims at gaining victory, and *cavil*, which aims at finding mere faults, are excluded.

An instance of the discussion is given below:

Disputant - There is a soul.

Opponent - There is no soul.

Disputant - Soul is existent (proposition)
//logical inference follows//

Opponent -Soul is not-existent (proposition)
//logical inference follows//

Disputant -The scripture which is verbal testimony declares the existence of soul (another *pramā na*).

Opponent . . . .

Disputant - If there is no soul, it would be impossible to apprehend the same object through sign and touch (*tarka*, or confutation).

Opponent . . . .

Disputant -The doctrine of soul harmonizes well with various tenets which we hold, viz., . . . (*siddhanta*). Therefore, there is soul.

The discussion would be endless if the opponent does not admit the authority of a scripture or of the established tenets. We may, however, pretend that he does that and then, in a form of discussion, we have wrangling. (5)

1.2.2. *yathoktopapannaschalajātinigrahasthānasā dhanopālambho jalpan*- Wrangling is presented as stated (=i.e., in the manner aforesaid as discussion), /but/ being apprehended by such establishing means as quibble, futility, which (actually) it deserves a rebuke.

Thus the quibble is formally presented as sophistry regarding the instrument of right knowledge, and futility, when confutation is concerned.

1.2.3. *sa pratipaksasthāpanahino vitaṇḍā* - that (same) /i.e. wrangling/, which consists in mere attacks on the opposite side, is *cavil.*

A caviller does not establish anything but merely carps at the arguments of his opponent. This is different from the positive pretensions of quibble and futility. But it is obviously conducive to exposing the apparent ground.

1.2.4. *savyabhicārariviruddhaprakaranasamasādhyasamakālātītā hetvābhāsāh* - Fallacies of reason (or apparent grounds) are the erratic (multifarious, deviation-containing), and contradictory; they are synonymous with the subject under discussion: synonymous with what is to be established, and time-expired.

In this enumeration of the pseudo-marks we have, of course, a reflection of logical form, taken from the point of view of the material content of logical mistakes. The same content, as we shall see, is shared with analogues, as a positive retrospection on the caviller's denials. The caviller tries to show that valid marks are a sham. By using *jāti,* he attempts to present the sham marks as valid. What remains is to discuss why the classification of *hetvābhāsas* is not developed to the extent that the *jāti is*.

1.2.5. *anaikāntikah savyabhicāraḥ* - The erratic (multifarious, deviation-containing) is the reasoning which leads to more conclusion than one.

An instance of the erratic is given below: -

Proposition. - Sound is eternal.

Erratic reason. - Because it is intangible.

Example. - Whatever is intangible is eternal, as atoms.

Application. - So is sound (intangible).

Conclusion. - Therefore sound is eternal.

Again (as a kind of cavil, unfolded into an apparent ground):

Proposition. - Sound is not eternal.

Erratic reason. - Because it is intangible.

Example. - Whatever is intangible, is non-eternal, as intellect.

The reasoning here has drawn us to two opposite conclusions. The matter of the split is *jati* of a special kind.

1.2.6. *siddhāntamabhyupetya tadvirodhī virudhaḥ* - The contradictory is a contradiction of what is dependent on the established tenet. For example: "A pot is produced, because it is eternal"(?)

1.2.7. *yasmātprakaraṇacintā sa nirṇayārthamapadiṣṭah prakaraṃasamaḥ* - Reason which provokes the question covers the entire subject of discussion (if its solution is concerned). For example: "Sound is not eternal, because it does not posses attribute of eternalness".

1.2.8. *sādhyāviśiṣṭassādhyatvā sādhyasamaḥ* - unproved is a reason that is in need of proof, in the same way as the proposition does. For example: "Shadow is substance, because it possesses motion (but does it?)"

1.2.9. The mistimed is the reason that is adduced when the time in which it might hold good passes: *kālātyayapadiṣṭa kālātītaḥ*. For example: Sound is not durable, because it is manifested by a certain combination, like color. The color of a pot is manifested when the pot comes into combination with a lamp, but the color existed before it disappears. Similarly, the sound of a drum is manifested when the drum comes into contact with a drumstick . . . But as an example it is not correct (because sound is produced by the contact and will disappear soon after disconnection). The analogy between color and sound is not complete; hence the reason is mistimed.

All of these erroneous reasons obviously rest on the application of the mechanics of false analogy.

And now, finally, we turn to the positive reversion of cavil, in the form of quibble and futility.

1.2.10. *vacanavighātòrthavikalpopattyā chalaṃ* - Quibble is an opposition introduced into proposition /as an assumption of alternative meaning/.

1.2.11. *tattrividhaṁ vākchalaṃ sāmānyacchalamupacāracchalaṃ ceti* - It is of three kinds, viz., quibble as a metaphor.

1.2.12. *aviśesābhihitèrthe vakturabhiprrāyādarthantarakalpanā vākchalam* - A quibble with respect to a term consists of wilfully taking the term in a sense different than intended by a speaker who used it ambiguously.

A speaker says: "This boy is *nava-kimbala* (in possession of a new blanket);

A quibbler replies: "This boy is not certainly *navi-kambala* (in possession of nine blankets)".

The case of equivocality.

1.2.13. *sambhavatòrthasyātisāmānyayogādasambūtārthakalpanā sāmānyacchalam* - A quibble in respect to a genus consists in asserting the impossibility of a thing which is indeed possible, on the ground that it belongs to a certain genus which is very wide.

A speaker says: "This *Brāhmana* is possessed by learning and [proper] conduct".

A quibbler replies: "It is impossible, for how can it be inferred? There are little boys who are *Brāhmans*, yet not in possession of learning and [proper] conduct".

1.2.14. A quibble in respect to a metaphor consists in denying the proper meaning of a word by taking it literally, while it was used metaphorically, and vice versa.

1.2.15. It may be said that a quibble in respect to a metaphor is in reality a quibble in respect to a term, for the first one is not different from the second.

1.2.16. But it is not so, because there is a distinction between them. Words are taken in their literal meaning in the first case and in the secondary meaning in the second [case].

1.2.17. If you do not admit that one is different from another simply because there is some similarity between them, then we should have only one kind of quibble.

In fact, all three are somewhat similar in their substitutive action. Similarity is the matter of analogy. Hence we have 'futility' materialized as a precondition of the quibble and the rest being possible.

1.2.18. *sādharmyavaidharmyābhyām̐ pratyavasthānām jātin* - Futility consists of offering objections founded on a mere similarity or dissimilarity; that is, mere content, or a formless matter of discussion.

A disputant says: "The soul is inactive, because it is all-pervading as ether".

His opponent replies: "If sound is inactive because it bears similarity to ether as being all-pervading, why is it not active because it bears similarity to a pot as [what is formed by] connection?"

The reply is futile, because it overlooks the logical form of the universal connection between the middle term and major term in arguments of the disputant and the opponent. Whatever is all-pervading is inactive, but whatever creates connection is not necessarily active.

Or again:

Disputant: "Sound is non-eternal, because unlike ether it is produced by effort".

Opponent: "If sound is not eternal, because as a product it is dissimilar to ether, why is it not eternal because as an object of auditory perception it is not similar to a pot?"

The reply is futile, because it overlooks the universal disconnection between the middle term and the absence of the major term. Universal disconnection between 'a product' and 'not non-eternal' is certainly present, but there is no such disconnection between 'an object of auditory perception' and 'not eternal'.

Thus *jāti* obviously concludes the formation of the notion of logical proof. What remains to be added is the following:

1.2.19. An occasion to rebuke arises when one misunderstands, or does not understand at all.

1.2.20. Owing to the variety of kinds, there is a multiplicity of futilities for rebuke /. . . /

Below follows a few excerpts from Vātsyāyanàs Commentary on Book I, Chapter I.

Topic I: Subject-matter, purpose and relations: Sutras 1-2.

Vāda, Jalpa and *Vitaṇḍā* are the three forms of discourse or controversy (*Kathā*). *Vāda* and *Jalpa* have definite ends in view; *Vitaṇḍā* has not. *Vāda* (assertion or discussion) has the ascertainment of the truth as its object. *Vitaṇḍā* (cavil) is merely destructive criticism. If it advances a proposition of its own, it ceases to be itself; if it does not, it becomes meaningless jargon.

Nirnaya (ascertainment) is *tattva-jñāna*, knowledge of truth. It is the result of the *Pramānas*. The *Vāda* (discussion) ends with it. *Jalpa* and *Vitaṇḍā* are required to maintain a discussion. The *Vāda* is a discussion in which different speakers take part, each seeking to prove his own hypothesis (*tarka*), and which ends with the establishment of such a hypothesis. *Jalpa* (sophistry) and *Vitaṇḍā* (cavil) are varieties of the *Vāda* employed to keep up the effort in the pursuit of truth. (6)

There are 24 varieties of 'analogue' listed in *The Nyāya-Sūtra*.

(1) Equation due to the homogeneity of properties (literally, 'balancing homogeneity', '*s̀ādhamarya-sama*').

If an objection is brought forward against an argument that is based on a homogeneous instance (due to its properties) and that objection is based on an instance of the same kind, i.e., on a comparison of properties (but different ones this time), then the objection is empty and can be called 'equation due to homogeneity of properties'.

Disputant - to prove the non-eternalness of sound - says:

Sound is not eternal,
because it is an effect of effort,
like a pot.

Opponent offers an empty objection:

Sound is eternal,
because it has no substance [intangible],
like the sky.

The argument on non-eternity of sound is based on the homogeneity of a certain property of sound with a non-eternal pot: both are effects of effort. The alternative opinion, i.e. on the eternity of sound, is claimed on basis of a postulated homogeneity of sound, and the eternal sky and is thus founded on a presupposed intangibility of the both. This objection is empty; it is designated as an 'equation due to the homogeneity of properties' and aims to prove equivalency of argumentation on both sides according only to a homogeneity of instances utilized [by them]. All created bodies are not eternal, but not all intangible things (reason, knowledge [for instance]) are eternal.

(2) Equation due to the heterogeneity of properties (literally, 'balancing heterogeneity', *vaidharmya-śama*).

If an objection is brought forward against an objection that is based on a heterogeneous instance and the former objection is based on a similar instance, then the former objection is empty and is defined as an 'equation due to heterogeneity of properties'.

Disputant - to prove the non-eternalness of sound -says:

Sound is not eternal,
because it is an effect of effort,
while what is eternal is not created,
like the sky, for instance.

Opponent offers an empty objection, thus:
Sound is eternal,
because it is intangible,
and what is not eternal is not intangible,
like a pot, for instance.

The argument on the non-eternity of sound is based on the heterogeneity of sound and the eternal sky. An alternative claim, i.e. on the eternity of sound is founded in the heterogeneity of sound and non-eternal pot. Such an objection is empty and is defined as an 'equation due to heterogeneity of properties'; [this] objection aims to prove an equivalency of argumentation on both sides, [namely, argumentation] regarding the heterogeneity of instances utilized.

(3) Equation due to abundance (literally, 'balancing an addition', '*ùtkarṣa-sama*').

If an objection is brought forward against an argument based on a known characteristic of an instance [model] and that objection is based on a certain additional characteristics, then the objection is empty and is defined as 'equation due to abundance'.

Disputant - to prove the non-eternalness of sound - says:
Sound is not eternal,
because it is an effect of effort,
like a pot.

Opponent offers an empty objection, thus:
Sound is not eternal (and has to be tangible),
because it is an effect of effort,
like a pot (which is non-eternal and tangible).

The opponent assumes that if sound is not eternal, like a pot, it has also to be tangible, like a pot; whereas if it [sound] is intangible, it is non-eternal as well. This kind of empty objection is named 'equation due to abundance'; the objection intends to prove the equation of arguments from both sides with respect to a certain supplementary characteristic (inherent to instance and subject as its attribute). It is based on the erroneous assumption of complete similarity between a subject and an instance [model]. Although the equation is not denied due to certain common characteristics of the subject and instance, these characteristics can still be significantly different due to some other characteristics. If we presuppose, for instance, similarity between pot and sound due to their tangibility, we cannot base such an assumption on logical inherence due to their derivativeness (because they're some things like reason or knowledge, which are derivative [created], but not tangible).

(4) Equation due to insufficiency (literally, 'balancing a substratum', *apakarṣa-śama*).

If against the argument based on characteristic of an instance [model] the objection based on a different characteristic absent in the former is brought forward, such an objection is empty and defined as 'equation due to insufficiency'.

Disputant - to prove the non-eternalness of sound - says:
Sound is not eternal,
because it is an effect of effort,
like a pot.
Opponent offers an objection thus:
Sound is not eternal (and heard),
because it is an effect of effort,
like a pot (which is both non-eternal
and an effect of effort).

The opponent admits that sound is not eternal, like a pot; but he also asserts that it [sound] has to be inaudible), like a pot (since pot is not audible); but as soon as sound is audible, it is not eternal. This kind of empty objection is defined as 'equation due to insufficiency'; it intends to demonstrate an equation of arguments from both sides with respect to a certain characteristic which is absent in an instance [model] (and thus is presupposed to be absent in subject too).

Presupposed similarity (up to equation) between 'sound' and 'pot' is not ensured by any foundation (namely by their derivativeness, 'being an effect of effort').

(5) Equation due to disputability (literally, 'selectivity', 'balancing the questionable', *varnya-śama*).

If someone objects to an argument claiming that the characteristics [properties] of an instance [model] are disputable to the same extent as [the characteristics of] a subject, such an objection is empty and is defined as an 'equation on the disputability'.

Disputant - to prove the non-eternalness of sound - says:
Sound is not eternal,
because it is an effect of effort,
like a pot.
Opponent offers an objection thus:
Pot is not eternal
because it is an effect of effort,
like sound.

The opponent thinks that if the non-eternity of sound is doubtful, why not doubt the eternity of a pot as well, since they both are effects of effort? His goal is to reject the first argument on the basis of the uncertainty of the instance utilized in this argument. This kind of empty objection is called 'equation due to disputability'; it intends to present an equation of arguments from both sides with regard to a disputable nature of both subject and instance [model]. This cancels all the opportunities of logical inference, since [such empty objection] ignores the distinction between a subject and an instance [model].

(6) Equation due to indisputability (literally, 'balancing the unquestionable', *avarnya-śama*).

If someone objects to an argument granting that the nature [character] of a subject is indisputable, as well as the nature [character] of an instance [model], then such an objection is empty and is defined as 'equation due to indisputability'.

Disputant - to prove the non-eternalness of sound - says:
Sound is not eternal,
because it is an effect of effort,
like a pot.
Opponent offers an empty objection thus:
Pot is not eternal,
because it is an effect of effort,
like sound.

The opponent presupposes that if the non-eternity of a pot is not questioned, why is it impossible to admit the non-eternity of sound, since they are both an effect of effort? This kind of empty objection is called an 'equation due to indisputability'; it intends to prove an equation of arguments from both sides when the unquestionable nature [character] of both subject and instance [model] is concerned. It completely ignores the difference between the subject and instance [model] and thus ends possibilities [to apply] logical inference.

(7) Disjunctive equation (literally, 'balancing the alternative', *vikalpa-śama*).

If someone objects to an argument by insisting on the disjunctive nature [character] of a subject and an instance [model] such an objection is empty and is defined as 'disjunctive equation'.

Disputant - to prove non-eternalness of sound - says:
Sound is not eternal,
because it is an effect of effort,
like a pot.
Opponent offers an objection thus:
Sound is eternal and shapeless [formless],
because it is an effect of effort,
like a pot (which is non-eternal and has a shape [form]).

The opponent admits that both the pot and sound are the effect of effort, although one has a shape [form], whereas another is shapeless [formless]: why, according to the same principle, [not to admit that] one (pot) is not eternal, and another (sound) is eternal? This kind of empty objection is called a 'disjunctive objection' and intends to prove an equation of arguments from both sides with regard to disjunctiveness of characteristics inherent in both subject and instance [model].

It presupposes the identification of sound and pot due to a characteristic (eternity) which is not foreseen by any foundation (is 'effect of effort').

(8) Equation of question (literally, 'balancing the reciprocity', *sadhya-śama*).

Disputant - to prove non-eternalness of sound says:
Sound is not eternal,
because it is an effect of effort,
like a pot.
Opponent offers an empty objection thus:
Pot is not eternal,
because it is an effect of effort,
like a sound.

The opponent supposes that since both pot and sound are the effects of effort, one of them demands a proof of its non-eternalness to the same extent as the other. The non-eternity of sound is demonstrated according to the instance of a pot, and the non-eternity of a pot according to the instance of sound. This leads to inter-correlatedness of a pot (an instance [model]) and sound (a subject), so that it becomes impossible to come to a definite conclusion about the eternity or non-eternity of sound. This kind of objection is called an 'equation of question (or thesis)' and intends to deadlock argumentation through the assumption of reversibility of the subject and instance. It is based on the erroneous assumption that instance acquires the same status as subject. In fact, an instance does not require a proof of the authenticity of its characteristics, since it is common knowledge that 'pot' is not-eternal and 'effect of effort' [is produced].

(9) Equation due to co-presence (literally, 'balancing the co-presence', *`prāpti-śama*).

If again an objection is brought forward against an argument that is based on the co-presence of a foundation and a predicate and the objection itself is based on a similar type of co-presence, then the objection is empty. In addition, since the foundation here does not differ from a predicate, the objection is defined as an 'equation due to co-presence'.

Disputant - to prove that there is fire on a mountain - says:

There is fire on a mountain,
because there is smoke,
like in a kitchen stove.

Opponent offers an empty objection thus:

There is smoke on a mountain,
because there is fire,
like in a kitchen stove.

The disputant interprets smoke as a foundation, while fire as a demonstrable. The opponent raises a question: if smoke is present at the same place, where is the fire, or is it not there. If smoke is present at the same place as fire then, according to the opponent's claim, there is no criterion for a distinction between the foundation and predicate. According to his opinion, smoke appears to be a foundation for fire to the same extent as fire is a foundation for smoke. This kind of empty objection is called an 'equation due to co-presence' and aims to stop argumentation by an assumed fact of the co-presence of a foundation and a proving predicate [demonstrable].

(10) Equation due to mutual absence (literally, 'balancing the mutual absence', *`aprāpti-śama*).

If an objection is brought forward against an argument based on a mutual absence of a foundation and predicate, and the objection itself is based on a similar type of mutual absence, then the objection is empty. In addition, such an objection is defined as 'equation due to mutual absence' because of its incompatibility with a predicate.

Disputant - to prove that there is fire on a mountain - says:
There is fire on a mountain,
because there is smoke,
like in a kitchen stove.
Opponent offers an empty objection thus:
There is smoke on a mountain,
because there is fire,
like in a kitchen stove.

The opponent asks: "Should smoke be regarded as the foundation because it is absent at the place of the fire?" - "Such an assumption would be absurd". The foundation can offer no help in establishing a predicate if it [the foundation] is not connected to the predicate, like a lamp that cannot light the thing which is too far away from it. If a foundation not linked to a predicate helps ascertain the latter, when the fire can be a reason for the smoke to the same extent as the smoke be a reason for the fire. This kind of empty objection is called 'equation due to mutual absence' and intends to undermine the argumentation because of the mutual absence of a foundation and predicate. This argumentation is based on the overestimation of a distant-action.

(11) Equation due to infinite regression ('literally, 'balancing infinite regression', *prasanga-śama*).

If someone objects to an argument because of an instance which cannot be determined due to a number of reasons, then such an objection is empty and is defined as an 'equation due to infinite equation'.

Disputant - to prove the non-eternity of sound - says:
Sound is not eternal,
because it is an effect of effort,
like a pot.
Opponent offers an empty objection against the disputant thus:
Sound is eternal,
because it is not an effect of effort,
like the sky.

If non-eternity of sound has been proved by using an example with a pot, how [is it possible] to demonstrate the non-eternity of a pot? In that way infinite regression, which discredits the assertion 'sound is not eternal' to the same extent as the assertion 'sound is eternal', is created. An objection of this type is called an 'equation due to infinite regression' and intends to stop argumentation by introducing infinite regression, which, as we saw, disintegrates an instance [model]. An instance [model] is a thing with characteristics quite familiar to a layman and an expert. The definition of its nature [character] should therefore not require a number of reasons. This is why an objection due to equation on infinite regression has no sensible foundation.

(12) Equation due to counterexample (literally, 'balancing the counter-example', *pradṛṣṭānta-śama*).

Disputant - to prove the non-eternity of sound - says:
Assertion: Sound is not eternal,
Foundation: because it is an effect of effort,
Instance: like a pot.
Opponent offers an empty objection against the disputant thus:
Assertion: Sound is not-eternal,
Instance: like the sky.

The opponent alleges that if sound can be recognized as not eternal by an instance of a pot, why is it impossible to claim that it is eternal by an instance of the sky? If an instance with the sky is not sufficient, an instance with a pot is not suitable either. This kind of empty objection is called an 'equation due to counterexample' and intends to stop argumentation by means of introducing an ordinary counterexample. An ordinary counterexample, without an accompanying foundation, cannot lead to a conclusion. One may rely only upon an instance accompanied by a foundation, but not a counterexample without a foundation. This is why an objection based only on a counterexample is empty.

(13) Equation due to non-produced-ness (literally, 'balancing non-produced', *anutpatti-śama*).

If someone objects to an argument due to a reason that the predicate connotated by the foundation is absent in a thing denotated by the subject and [that this predicate] is not produced, this objection is empty and is defined as an 'equation due to non-produced-ness'.

Disputant - to prove the non-eternity of sound - says:
Sound is not eternal,
because it is an effect of effort,
like a pot.
Opponent offers empty objection against the disputant by saying:
Sound is eternal,
because it is not an effect of effort,
like the sky.

The opponent presupposes that a predicate [property] connotated by the foundation; that, thus, as a result of action, it is not a *predicabilia* of the subject, i.e. of sound (since it is not produced yet). Therefore sound is not non-eternal and as such it has to be eternal. According to opponent, this is a reason to admit to the obvious concordance between the two sides of the question about the eternity of sound (since it is not a result of an action). This kind of objection is called an 'equation due to non-produced-ness' and intends to demonstrate an equivalence of arguments from both sides as a result of the assumption that thing denotated by a subject is not produced yet.

This objection is empty because the subject can be maintained as such only after it is produced; so, there should be no obstacle for its predication by some property of the foundation. The objection, namely: "Sound is eternal before it is produced because it is not a result of any action", has no sense because we

cannot regard sound as subject before it is produced. Sound, as soon as it is eternal, should be the result of an action, while as such it is not eternal.

(14) Equation due to doubt (literally, 'balancing doubt', *s̀amṣaya-śama*).

When someone objects to an argument on the basis of a doubt as the result of the homogeneity of eternal and non-eternal, when an instance appears to be an object of perception to the same extend as its foundation [principal term], such objection is empty and is defined as 'equation due to doubt'.

Disputant - to prove the non-eternity of sound - says:

Sound is not eternal,
because it is an effect of effort,
like a pot.

Opponent offers an empty objection thus:

Sound is not eternal (or eternal),
because it is an object of perception,
like a pot (or potness).

The opponent alleges that sound is homogeneous with a pot, as well as with potness because both are objects of perception; but because a pot is not eternal, while potness (as principal term for all pots) is eternal, a doubt as to the eternity (or non-eternity) of sound arises. This kind of objection is called an 'equation due to doubt'; it is meant to discredit argumentation as a result of doubts triggered by the homogeneity of eternal and non-eternal.

The objection is empty because it is impossible to say whether or not sound is eternal due to its homogeneity with potness; sound should be made in order for it to be regarded as non-eternal on a basis of its heterogeneity with potness, which is not an effect of effort [is not produced]. Although while making an assumption about homogeneity we can still have a doubt as to whether or not sound is eternal by assuming the heterogeneity [of sound and pot], we have to regard sound as not eternal. In that case we have to take into consideration that the genuine nature of a thing cannot be determined unless we are able to consider it in regard to its homogeneity on the one hand and, on the other, to its heterogeneity with other things. If after this we still have a doubt about this thing's genuine nature, we will never be able to eliminate it.

(15) Thematic equation (literally, 'balancing controversy', *prakaraṇa-śama*).

This objection is introduced on basis of homogeneity (or heterogeneity) from both sides.

Disputant - to prove the non-eternity of sound - says:

Sound is not eternal,
because it is an effect of effort,
like a pot.

Opponent offers an empty objection by saying:

Sound is eternal,
because it is heard,
like sonorousness.

The opponent assumes that the assertion of a disputant, namely on the non-eternity of sound, cannot be proved because of the presence of the foundation,

i.e. sonorousness, which is homogeneous with both sound (which is not eternal) and sonorousness (which is eternal); such a foundation, thus, compels us to eliminate the assertion that was introduced to prove it. Such an objection is called a 'thematic equation' and interrupts argumentation by creating a stumbling-block which has to be removed.

This objection, however, is empty and cannot undermine the major argument (because it leads to an assertion which can equally support arguments from both sides).

(16) Equation due to the absence of a foundation (literally, 'balancing non-foundation', *ahetu-śama*).

This objection emanates from evidence proving that it is impossible for a foundation [to exist] in all three modes of time.

Disputant - to prove non-eternalness of sound, - says:

Sound is not eternal,
because it is an effect of effort,
like a pot.

'Derivativeness' here becomes a foundation of the 'non-eternalness', which is a predicate.

(a) foundation does not precede a predicate, since it can be considered a foundation only after the latter has been established. Foundation cannot be called as such before a predicate is determined.

(b) foundation does not follow a predicate: it would be useless if a predicate could be proved without it [foundation].

(c) foundation and predicate cannot exist simultaneously because in this case they would be reciprocal, like the right and left horns of a cow. A foundation, which depends upon a predicate, cannot be used to prove the latter. This kind of objection is called 'equation due to absence of foundation' and tries to eliminate argument by demonstrating that a foundation is not possible in all three [modes of] time.

In fact, there is absolutely no way to manipulate a foundation. Knowledge of cognizing and establishing what ought to be established is [supposed to be] achieved on a foundation which as such has to precede [something] cognizing and establishing. If we admit that a foundation is impossible, what becomes a foundation of an objection itself? Since the objection is not possible, the initial argument remains valid.

(17) Equation due to presumption (literally, 'balancing the presumption', *arthapatti-śama*).

An objection moved forward on the basis of a presumption is empty and defined as 'equation due to presumption'.

Disputant - to prove non-eternity of sound - says:

Sound is not eternal,
because it is an effect of effort,
like a pot.

Opponent offers an empty objection by saying:

Sound is presumably eternal,
because it is bodilyless,
like the sky.

The opponent assumes that if sound is eternal because of its homogeneity with non-eternal things (for instance, with respect to its 'derivativeness'), then it is also quite possible to assume that sound is eternal due to its homogeneity with eternal things (for instance, with respect to its bodilylessness). This kind of objection is called 'equation due to presumption' and intends to cut short argumentation by means of equation with a certain presumption. Such an objection is empty because if according to a presumption it is allowed to introduce things non-previously-discussed, a possibility to damage the objection itself on the basis of that presumption is wrong and leads to unexpected conclusion.

Sound is eternal,
because it is bodilyless,
like the sky.

If, according to a presumption, we can draw a conclusion not foreseen by a foundation, it is quite easy to draw the following conclusion from this objection:

Sound is presumably not eternal,
because it is an effect of effort,
like a pot.

With [conclusion] the objection itself is damaged. In fact, a presumption proposed by an opponent appears to be false. If it is claimed that "sound is not eternal because of its homogeneity with non-eternal things", it is logical to deduce a presumption that "sound is eternal because of its homogeneity with eternal things" and *vice versa*. There is no rule stating that presumption is allowed in one case and is forbidden in alternative situation; in the event of two alternative presumptions, however, it is certainly impossible to draw a certain [unified] conclusion. Therefore, the objection called 'equation due to presumption' is unacceptable.

(18) Equation due to non-difference (literally, 'balancing non-difference', *aviśeṣa-śama*).

If a subject and an instance are considered as indistinguishable with regard to both of them possessing a certain characteristic, i.e. because they have a common characteristic connotated by a foundation, we can conclude that all things are mutually non-distinguishable (because they [things? characteristics?] all exist). This kind of objection is called 'equation due to non-difference'.

Disputant - to prove the non-eternity of sound - says:

Sound is not eternal,
because it is an effect of effort,
like a pot.

The opponent offers the following empty objection: If a pot and sound are considered as indistinguishable with respect to non-eternity because they are both produced, it follows that all things are mutually indistinguishable because they all exist. Therefore, there is no distinction between eternal and non-eternal, and sound can be considered as eternal. This kind of objection is called 'equation due to non-difference' and intends to damage an argument by asserting that all things are mutually indistinguishable.

The objection is empty because features common to both subject and instance can sometimes be hidden in a foundation, sometimes not.

Sound is not eternal,
because it is an effect of effort,
like a pot.

Both sound and pot here have a common feature of derivativeness and are considered indistinguishable because they possess [the characteristic] of non-eternity. According to the same principle, if all things are considered indistinguishable, since they all exist, how, then, does one come to know in what respect they might be different? If they are considered indistinguishable in respect to their non-eternity, the argument will be as follows:

All things are non-eternal,
because they exist,
like (?)

Since within this argument a subject can be any thing, nothing which can serve as an instance is left. [A part of] a subject cannot be an instance since an instance has to be sufficiently grounded while a subject is precisely what is expecting its establishment. Since an instance is absent, an argument as such does not lead to any conclusion. In fact, all things are non-eternal because at least some of them are eternal. In other words, non-eternalness is present in some existent things and is absent in some other existent things. Therefore, all things are not indistinguishable, and an objection based on 'equation due to non-difference' appears to be empty.

(19) Equation due to demonstration (literally, 'balancing the demonstration', *upapatti-śama*).

Disputant - to prove the non-eternity of sound - says:

Sound is not eternal,
because it is an effect of effort,
like the pot.

The opponent offers an objection by proposing the following demonstration of the eternity of sound:

Sound is eternal,
because it is intangible,
like a pot.

The foundation of the first demonstration confirms the non-eternity of sound, the foundation of the second one proves its eternity. Both demonstrations are considered correct. The opponent brings forward a second evident demonstration as balancing the first one and thus dead-locks argumentation. Such an objection is called 'equation due to demonstration'.

This objection is empty because of the acceptance of the first demonstration. By claiming that both demonstrations are supported by foundations, the opponent admits to the correctness of the first demonstration, in favor of non-eternalness of sound. In order to escape incompatibility between the two demonstrations, he later denies the foundation which proves non-eternity.

We can then ask, why does he not deny another foundation as well, in favor of the eternity of sound, since he could easily escape the incompatibility by rejecting any of these foundations? The objection called 'equation due to demonstration' is therefore groundless.

(20) Equation due to perception (literally, 'balancing perception', *upalabdhi-śama*).

If objection is brought forward due to the foundation that we perceive a nature [character] of a subject even without foundation, the objection is empty and is called 'equation by perception/grasping'.

Disputant - to prove the non-eternity of sound - says:

Sound is not eternal,
because it is an effect of effort,
like a pot.

Opponent offers an empty objection by saying: It is quite possible to prove the non-eternity of sound even without a foundation [proof] of its derivativeness since we *perceive* sound; for example, a rustling of leaves caused by wind. Such an objection is called 'equation due to perception' and intends to bring to naught argumentation by opposing it to act of perception. The objection is empty because the character [nature] of a subject can be determined by other means as well. The argument "Sound is not eternal, because it is an effect of effort, like a pot" implies that the non-eternity of sound can be proved on the basis of its derivativeness. This does not reject other means (perception, etc.,) by which non-eternalness of sound can be proved. Therefore, the objection called 'equation due to perception' does not annul a major argument.

(21) Equation by non-perception (literally, 'balancing non-perception', *anupalabdhi-śama*).

If against an argument proving non-existence of a thing by its non-perception an objection aiming to demonstrate [something] quite opposite by non-perception of non-perception is brought, such an objection is empty and is defined as 'equation due to non-perception'. If non-perception of a thing proves its non-existence, then the non-perception of non-perception has to demonstrate, according to the opponent's opinion, its existence. This objection is called 'equation due to non-perception' and is meant to oppose non-perception as a balancing argument. However, such objection is not suitable since non-perception is simply a negation of perception. Perception relates to [something] existent, while non-perception - to something non-existent. Non-perception of non-perception, which simply means the negation of non-perception, cannot be interpreted as related to any existent thing. Therefore, the objection called 'equation due to non-perception' remains groundless.

(22) Equation due to non-eternity (literally, 'balancing non-eternalness', *anitya-śama*).

If someone, disclosing that things considered to be homogeneous have identical characteristics, objects this to argumentation and attributes non-eternity to all things, his objection is empty and is defined as 'equation due to non-eternalness'.

Disputant - to prove non-eternalness of sound - says:
Sound is not eternal,
because it is an effect of effort,
like a pot.

The opponent offers an empty objection: If sound is not eternal because of its homogeneity with a pot (which is not eternal), it follows that all things are not eternal since they all are homogeneous with a pot in this or that respect, which makes any conclusion impossible (because of the absence of homogeneous instances). Such an objection is called 'equation due to non-eternalness' and aims to counterbalance argumentation and an assumed foundation: all things are non-eternal.

The objection is empty because nothing can be determined on foundation of simple homogeneity of one thing with another: a logical connection between foundation and predicate has to be taken into consideration. Sound, for example, is non-eternal not because of its homogeneity with a non-eternal pot, but because there is a link between 'derivativeness' and 'non-eternalness'. Therefore, it is impossible to conclude that all things are homogeneous with a non-eternal pot in this or that respect. Simple homogeneity of all things in this or that respect does not demonstrate their eternalness as well. Therefore, the objection called 'equation due to non-eternalness' is groundless.

(23) Equation due to eternity (literally, 'balancing eternalness', *nitya-śama*).

If someone objects to an argumentation by attribution of eternalness to non-eternal things on basis of their eternal non-eternity, the objection is empty and is called 'equation due to eternity'.

Disputant - to prove the non-eternity of sound - says:
Sound is not eternal,
because it is an effect of effort,
like a pot.

Opponent offers an empty objection by saying:

It is claimed that sound is not eternal. But does non-eternalness exist in sound always or just sometimes? If non-eternalness exists always, sound has to be always-existent, or always-non-existent. If eternity has a frequency of appearance, sound has to be considered eternal as well, because of the absence of non-eternity. This objection is called 'equation due to eternity' and pretends to suppress argumentation by claiming eternity a means to balance argumentation. However, this objection is groundless because a counterbalancing thing is always non-eternal (due to the eternity of non-eternity).

(24) Equation due to effect (literally, 'balancing the effect', *karya-śama*).

If someone objects to an argument, pointing out a diversity of effects of an action, then the objection is empty and is called 'equation due to effect'.

Disputant - to prove the non-eternity of sound - says:
Sound is not eternal,
because it is an effect of effort.

The opponent offers an empty objection: An effect of an effort is revealed in two different ways: (1) by the production of something which did not exist

before, for instance, a pot; (2) by the discovery of something that existed before, like, for instance, water in a well. Is sound an effect of the first kind [of revelation] or of the second? If sound is produced by the first revelation, it is not eternal, if by the second, it is eternal. Because of this diversity of the effects of effort, it is impossible to draw a conclusion on the non-eternity of sound. Such an objection is called 'objection due to effect'. However, the objection is empty, since in the case of sound, effort does not produce effect of the second sort. It is impossible to state that sound is discovered by our effort, since we cannot prove that it [sound] existed before. That sound did not exist before [our effort to disclose it] can be proved by our non-perception of it at that time. It is impossible to say that our non-perception was caused by some kind of a curtain because any curtain is unable to cover sound. Therefore, sound is effect not discovered, but produced.

If such an argument is rejected on the basis of the ambivalence of the word 'effect' why not to decline an objection for the same reason? The foundation of the argument is as wrong as the foundation of the objection. Indeed, there is no particular reason to presuppose that an 'effect' in an argument signifies 'a thing produced, not discovered'; as there is also no reason to assume that this word ['effect'] in an objection means 'a thing produced, not discovered'. Therefore, the objection called 'equation due to effect' is self-destructive. (7)

Perhaps, the varieties of 'analogue' (8) analyzed above represent cases [of incorrect inference] or may be interpreted as forms of an incorrect inference, which permits us to consider different logical structures of analogy. However, their correlation with a generally accepted conception of analogy is unclear. Would such a rapprochement mean that any analogical inference is wittingly false?

Logical inference and analogy in *Nyāya* are regarded as different and as independent sources of trustworthy knowledge. This rapprochement means only that any analogy is not inference and that when a correct construction of logical inference is considered, different cases of incorrectness can be quite open for their interpretation as analogical forms.

As for the 'truthfulness' of an analogy as such, it should be taken into account that the starting point in *Nyāya*, as well as in any other system of Indian philosophy, is epistemological, not natural. Neither world, nor world-outlooks (to a certain extent) 'exist' before the means and sources of their cognition are 'produced'. The epistemological position of *Nyāya* is an attitude of extreme logical realism and contructivism. Strictly speaking, *all* images [pictures] of the world are false, all ontologies are *analogies*, and 'correct' logical form - deduction - is 'imageless', i.e. 'empty in its content' - if not to take into consideration that its structure certainly contains analogy, since analogy is 'dragged along' in any attempt of ontologization and 'cosmologization' that is based on deduction.

This is why analysis will proceed in following direction: first, analogical structures within other sources of knowledge will be considered and only then the ontological and physical conceptions of *Nyāya* analyzed. Such a sequence is valid for all systems of Indian philosophy, but for *Nyāya* first and foremost.

Indeed, *Nyāya* philosophy was initially developed as 'pure epistemology' and only then did this philosophy borrow, quite indifferently (i.e., passively), its ontology and physics from *Vaiśeṣikā* (since it was sufficiently equipped for this). Thus, an analysis of analogy in *Nyāya* must follow the history of the development of this system.

V. *JĀTI* WITHIN THE STRUCTURE OF DISPUTATION

After an enumeration of 'analogues' is completed its utterance in discussion (in the sense of 'non-truthfulness' analyzed above) is analyzed in *The Nyāya-Sūtra*.

To demonstrate the emptiness of analogues, they should be tested according to the following principles:

(1) If a word in an objection is meant to have a special connotation [meaning], the same meaning has to be preserved in a deductive argument; for example, the word 'effect' must be used in the same sense both by a disputant and his opponent.
(2) A defect relates to the objection of an objection to the same extent as to the objection itself.

Disputant - to prove the non-eternalness of sound - says:
Sound is not eternal,
because it is an effect of effort.
(Here 'effect' means a 'thing which is now produced').
Opponent - seeing that the effect is of a different kind - offers opposition:
Sound is eternal,
because it is an effect of effort.
(Here 'effect' means 'an opened [revealed] thing').

The disputant answers that sound cannot be regarded as eternal, because the foundation of 'effect' is erratic (and can also mean 'a thing that is now produced'). The opponent then remarks that sound cannot be regarded as non-eternal since the foundation [reason] 'effect' is erratic (can mean 'an opened [revealed] thing'). Thus, the defect of the objection can also be related to the objection to the objection.

(3) If an opponent admits that his objection is defective (which follows from the assertion that the same defect relates to the objection to the objection), this is called 'assumption [admittance] of opinion' (*matta-anunjñā*). A disputant offers an assertion, which is immediately objected to [by an opponent]. The disputant charges the objection with a defect, claiming, for example, a false foundation [reason]. Instead of eliminating the defect in his objection, the opponent charges that the disputant's objection to his objection has the same defect. This counter-charge of the opponent is

interpreted by the disputant as an admission of opponent's self-defeat. The answer of the disputant points out 'the assumption of opinion'.

(4). 'Assumption of opinion' also takes place when the disputant admits this defect as such, instead of adducing a foundation [reason] which eliminates the defect charged to his assumption.

Disregarding these four principles can lead to confusion in the so-called 'six-winged disputation' '(*śatpakṣi-vāda*) (9)

The first 'wing'. Disputant - to prove the non-eternity of sound - says:

Sound is not-eternal,
because it is an effect of effort.

(Here he means 'effect' as 'a thing produced', but he does not claim it explicitly).

The second 'wing'. Opponent - seeing that the word effect is of ambiguous meaning -offers an objection:

Sound is eternal,
because it is an effect of effort.

(Here 'effect' means 'a thing which already existed and is now revealed by effort').

The third 'wing'. Disputant - seeing that the foundation [reason] 'effect' is erratic charges the opposition with a defect by saying:

Sound is *not* eternal,
because it is an effect of effort.

(Here he means that a conclusion as to the eternity of sound cannot be made by claiming the sound as an 'effect', and that the reason of 'effect' is of erratic meaning, i.e. applied to either a thing that did not previously exist and is now produced or to a thing that already existed and is now revealed by effort. Since the foundation [reason] is erratic, the conclusion remains indefinite).

The fourth 'wing'. Opponent - finding that the foundation [reason] 'effect', which is erratic, proves neither the eternity nor non-eternity of sound - brings a counter-charge against the disputant by saying:

Sound is also *not* non-eternal,
because it is an effect of effort.

He alleges that the defect (*viz*. the erratic quality of reason) with which his opposition (*viz*. sound is eternal) is charged, is also directed against an objection made by the disputant (*viz*. sound is *not* eternal or non-eternal).

The fifth 'wing'. Disputant - finding that the counter-charge brought against him amounts to his opponent's admission of self-defeat - says: "The opponent, by saying that 'sound is also non-eternal', has admitted that it is not eternal as well. In other words, the counter-charge has proved the charge; that is, it indicates that the opponent admits the disputant's opinion".

The sixth 'wing'. Opponent - finding that the disputant, instead of rescuing his argument from the counter-charge, has taken shelter under his opponent's admission of the charge -says: "The disputant, by saying that 'sound is also not eternal' has admitted that it is also not non-eternal. In other words, if the

counter-charge proves the charge, the reply to the counter-charge proves the counter-charge itself."

'Wing' (*pakṣa*) in a logical argument [a syllogism] signifies a smaller premise. In an argument on analogy it means a 'prototype'. The first, third, and fifth wings belong to the disputant, whereas the second, fourth, and sixth belong to the opponent. The sixth wing is a repetition of the fourth, and the fifth a repetition of the third. The sixth wing is also a repetition of the fifth wing. The third and fourth wings involve the defect of 'admission of opinion', i.e. are liable to a critique of the faculty of judgment. All the wings are inessential except the first three.

The disputation would have come to a fair closure at the third wing if the disputant had pointed out that the word 'effect' had a special meaning, *viz.* a thing that did not previously exist but was produced. The disputant and the opponent, instead of stopping at the proper limit, have carried on their disputation through six wings beyond which no further wing is possible. (10) After the six-winged disputation has been completed, it becomes evident that neither the disputant nor the opponent is a person to argue with!

This is why in the sixteenth topic of *The Nyāya-Sūtra,* where arrangements for admitting defeat in a disputation are discussed, the last (22th) indication is [named as] an utterance of analogy ('likening') and is considered a foundation [reason]. (11)

VI. ANALYSIS OF EPISTEMOLOGICAL CATEGORIES (*PRAMĀṆA-PARIKṢA*) IN *THE NYĀYA-SŪTRA* (*SŪTRAS* 2-1-8-2-1-19), FROM THE POINT OF EXPOSURE [WITHIN THESE CATEGORIES] OF ANALOGICAL STRUCTURES

On means of cognition. There is an opinion that perception and other so-called means of rightful knowledge are untrue because they cannot exist simultaneously in three temporal dimensions. Perception is neither possible in the present nor in the past; nor in the future because it occurs neither before, nor after, nor together with objects of perception. If perception precedes the latter cases, it could not arise from a mere contact of a [certain] perception with its object. For example, it can be asked whether color precedes perception or perception [precedes] color. If it is stated that perception precedes or anticipates color, the accepted definition of perception, namely that perception arises from the contact of an organ of the senses with its object, has to be rejected. If perception takes place after contact, it becomes impossible to allege that objects of senses are consolidated because of perception. For example, color may be regarded as an object established by visual perception. Such a conclusion, however, has to be rejected if we consider perception as being *a posteriori* [with regard] to the object. If perception is simultaneous to objects, our consciousness would not be able to structure [the flux] since such a structure is absent within the corresponding objects [of perception].

In addition, different objects of perception can also co-exist, like, for instance, color and smell co-exist in a flavor. If we regard perception as simultaneous with [existence of a perceived] object one has to acknowledge that color and smell can be perceived simultaneously, i.e. the perception of color [can take place] together with the perception of smell. Such together-ness, however, is not possible because two acts of perception and two corresponding [cognitive] realizations certainly cannot occur simultaneously. Since a sequence of our [mental] realizations is displaced in time, perception cannot be simultaneous with respect to its object. This is why all other so-called means of true knowledge are not only untrue, but impossible. In addition, if an object of knowledge is ascertained by means of knowledge, the latter, in its own turn, has used to be established by means of another source of cognition. For example, a scale is a device to weigh a thing, but in order to weigh the scale itself another scale is necessary. The same is true with means of cognition: it is a device in relation to an object, but as the object of analysis it requires another instrument. If it is not the case, one has to admit that object can be established without any means of cognition.

Establishment of truthfulness of means of trustworthy [authentic] knowledge. A response to these charges implies that if perception and an other means of cognition are impossible, then their negation is not possible too (since when an objectness in negation is absent, the very negation is not efficient). If a means of cognition needed to establish truthfulness of a certain thing is absent, how does it become possible to establish a negation of its truthfulness? When we deny [some]thing on a basis of its non-perception-ness, we implicitly admit that perception is a means of trustworthy knowledge. Generally speaking, there is no such regulation that a means of cognition either precedes its object, or follows it, or is simultaneous with it. A means of cognition has an analogical nature and can be compared either to a drum which precedes the sound the drum makes, or light which appears together with a sunrise, or smoke [which is] simultaneous to fire. A means of cognition is self-supportive, like the light of a lamp. Just as a lamp lightens both itself and the surrounding things, a means of knowledge serves to establish truthfulness of itself and its surrounding objects. Although a lamp, which lightens other things, is itself lightened by our glance, it is still impossible to deny the general notion of a lamp as different from objects lightened [by it]. Exactly in the same manner, as it seems, it is important to maintain the general notion of a means of cognition in contradistinction to an object of cognition. This is why a means of cognition is neither non-trustworthy, nor impossible.

[Sensual] perception. From time to time it was asserted that the very definition of perception is imperfect [erratic] since it does not take into account connections between subject (*ātman*) and reason (*manaḥ*), as well as between reason and organs of senses, which also belong to the variety of causes of perception. A definition which admits as suitable for perception not all, but only some causes, has a structure of analogy. Even if there is a contact of organs of senses with an object, knowledge does not emerge until subject and reason are not

connected. An organ of sense, which comes into contact with an object, produces knowledge only by dint of reason. This is why a definition of perception as a source of knowledge must mention a conjunction of *ātman* and *manaḥ*. In addition, a contact of senses and object sometimes may not serve as a cause of perception: for instance, when someone does not see a color of an object in front of him while listening spellbound to a song.

It has been stated in response that if a contact of *ātman* and *manaḥ* is mentioned as an essential element of a definition of perception, the categories of *manaḥ* that signify 'direction' (*dik*), 'place' (*deṣa*) 'time' (*kāla*), and 'space' (*ākāśa*) have to be listed with the causes of perception mentioned above. However, such an enumeration is not preferable because categories of reason are not real causes: they are indifferent to various types of perception. It is important to note that the notion of *ātman* is not excluded, in fact, from the definition of perception, because knowledge is a sign for cognizing subject. Perception is defined as knowledge, while knowledge presupposes a subject to accumulate it. Therefore, even by a mere considering of knowledge we imply that *ātman* is a condition of perception. *Manaḥ* is not neglected in the definition too, since we take into account the non-simultaneous-ness of acts of perception. Perception is defined as knowledge. An important characteristic of knowledge is that no more than one cognitive act can be performed at any given moment of time. Knowledge possesses this characteristic because of a reason (*manaḥ*) which, as an atomized substance, connects the organs of senses to the production of knowledge. That is we imply reason (*manaḥ*) as a condition of perception when we speak about knowledge. Contact of an organ of senses with an object is explicitly mentioned as a *specific* cause of perception, since there are many varieties of knowledge. Connection of *ātman* and *manaḥ* always takes place, while contact of an organ of sense with an object occurs only in the event of perception, and becomes the immediate cause of the latter. In defining perception, we only mentioned a specific cause and omitted the general causes which precede, not just perception, but any other sort of knowledge. By defining perception as knowledge, which arises from the contact of a certain organ of senses with an object, we distinguish five specific types of such cognition, namely: (1) visual perception; (2) acoustic perception; (3) olfactory perception; (4) gustatory perception; (5) tactile perception. It is reputed that someone listening to a song, does not see a color [of a thing], although the latter is in front of him. But this does not prove that the contact of an organ of sense with its object is not a cause of perception (because, in this case, an intention to listen interferes with a visual perception, i.e., listening as a more attractive [perception] is chosen to the detriment of vision).

As for analogical structure of perception as cognition which grasps only a part instead of the whole (when, for instance, we say that we see a tree, while actually only perceiving its part, and knowledge of a tree is thus deduced from knowledge of its part on the foundation of a certain analogue [generation]), it has to be objected as follows: "Perception is not analogical judgment, because

even the opponent is forced to admit that a certain part of the tree has indeed been perceived. Therefore, perception as a specific means of cognition is not disputed by this objection (although estimation of its truthfulness is linked to analogy and has to be revealed by inference)."

Logical inference. From time to time it was stated that inherence is not a means of trustworthy knowledge (because in certain cases it can be erratic). For instance, from seeing high water we conclude that it has rained heavily in the upper reaches of a river, by observing an ant moving its eggs we expect rain to start soon; and when hearing the cry of peacock we infer that rain is about to start. However, these conclusions are not necessarily trustworthy for these conclusions are not necessarily present (since water in a river can be high as the result of a mill-pond; ants can move their eggs because their ant-hill has been damaged; and the cry of a peacock can be imitated by a man hiding in bushes).

We estimate that inference as such still remains a source of trustworthy knowledge, notwithstanding these and other similar mistakes (because any mistake can be found and eliminated as non-related to a mechanism of inference). Deep water because of a mill-pond is not the same as deep water after a heavy rain: in that last case, a flow is accelerated, water becomes turbulent, with head and knots, etc. Ants move their eggs before rain in a totally different manner, than they move them when their ant hill has been destroyed: without panic and calmly. An expert can easily distinguish a cry of a peacock from any imitation. In all such cases the source of mistake is not in a mechanism of inference, but in a judging [person]. Further specification of a doubtful indication permits to continue inference and to establish 'analogue' ['generation'].

Likening to a model [instance]. From time to time, it has been stated that 'analogy as such' is not a means of true knowledge because knowledge of a thing cannot be obtained by its similarity to other thing, regardless of whether this similarity is complete, significant, or just partial. It is impossible to claim that "A cow is similar to cow" on the basis of significant similarity. Likewise, it cannot be alleged on the basis of a significant similarity that a buffalo is similar to a cow. And one cannot assert on the basis of partial similarity that "A seed of Chamber is similar to mountain Mera".

However, we consider this objection to be superficial because likening to a model is undertaken in a situation in which there is a high degree of similarity. A high degree of similarity exists [and can be noticed] between such well-known objects, as cow and gavaya, etc.

Some allege that likening to a model is not an independent means of knowledge because when we notice a similarity between an unknown animal and a cow, we perform, in fact, an act of perception. A response to this is that we cannot deny the independence of a likening to a model as a source of knowledge, for how it is otherwise possible to comprehend that the name *'gavaya'* contains the general idea of *gavaya* as an animal? The very fact that *gavaya* signifies just one exemplar of a class of *gavayas*, does not result from perception, it follows from a particular kind of cognition called likening to a model [instance] or analogy.

On the other hand, it has been claimed sometimes that analogy does not differ from inference because knowledge in both cases is established with the help of perception. We recognize a *gavaya* at first sight because of its specific similarity to cow – a thing quite familiar to us. Here the knowledge of a non-perceived-before object is inferred by its similarity with a previously perceived object. This is nothing else but inference.

In response, it can be noticed that a prototype of a similarity is not at all a non-perceived gavaya. The *gavaya*, in which we discovered a similarity, was perceived first, and only after we noticed its similarity to a cow. Therefore, analogy provides us with knowledge of a *perceived* thing because of its likening to another thing, also perceptible. This characteristic distinguishes analogy from inference. Inference, after all, provides us with knowledge of a non-perceived thing through a perception of another thing. Analogy is not identical to inference because of the word 'similar' (*iva*) in a sentence: "*Gavaya* is *similar* to cow". The presence of this word makes it evident that analogy is a peculiar sort of trustworthy knowledge: a trustworthiness is considered as a similarity perceived directly, while inference is an indirect [perception].

Verbal testimony of authority. Some allege that this source of knowledge does not differ from inference because here [in analogy] knowledge is also obtained without immediate perception. However, in the case of inference, deduction is based on the knowledge of a general link in its natural sense which is always proved by an instance, while in the case of an authoritative testimony, deduction is legitimized by a *confidence* in authority - confidence which does not require any demonstration. Thus, verbal knowledge (*śabda*) is entirely non-analogical.

Akśapada-Gautama then analyses some sources of false [non-trustworthy] knowledge: *rumor*, which can be reduced to verbal testimony through the authorization of a source [of rumor]; *propositional inference* (implication) which can be identified with a deduction by means of a fixation of an analogous example; *probability*, i.e. knowledge about a certain thing according to another thing, when the former is included with or has a proportional relationship with the latter (like, for example, a measure of volume (*adhaka*) which can be cognized as one-fourth of another measure of a volume *drona*, if the latter is already known). 'Probability' therefore represents a case of *proportional* analogy, because the cognition of a part is undertaken through its fixed relation to the whole. However, some still regard this as inference because the fixed relation is a kind of relation of an invariable accompanying, or a general link. It becomes more complicated to interpret *non-existence*, or *absence* as a source of knowledge. In the case of two alternative things, non-existence of one [of them] establishes the existence of another. It has been claimed sometimes that 'non-existence' is not a source of trustworthy knowledge, because of the absence of the object cognized with its help. An object which possesses a certain property can be identified according to this property, but the absence of such a property is of no crucial help in identifying this object. A blue pot has blueness as its distinctive property. But how do we distinguish an object without properties by reason of properties which this object does not possess?

In response, it has to be mentioned that non-existence (absence) is a property of a propertyless object in the sense that propertylessness with respect to the discussed object means the absence of any characteristics that are inherent to other objects. Let us suppose that someone intends to acquire a non-blue pot. Absence of blueness becomes a sign which helps him choose the pot corresponding to his wishes and ignore any blue pot. An object can be cognized therefore in spite of the absence of properties. If someone alleges that absence of properties is impossible for [those objects which have] no properties at all, we will argue that absence is possible with respect to *any* property. A 'non-blue' object can exist only in relation to a 'blue' one, but blueness has to exist, somehow and somewhere [by itself]. Non-existence, for example, may be interpreted as a property of predecessorness of derivativeness. If it is claimed that a pot has to be [placed] here, we perceive, as a certain property, precisely this absence of a pot as a whole which is composed of parts. Non-existence, or absence, however, is not an independent source of knowledge. It is regarded as a sort of inference by *Nyāya*. [If so,] then the problem of analogue [generation] still remains open.

Doubt (sansaya) and analogy. It has been claimed sometimes that a doubt cannot arise within [re]cognition of both general and non-general propertieś a doubt about an object hardly seems when both important and non-essential properties of this given object are under investigation. For example, if we notice a tall moving object during twilight, we will not doubt whether it is a man or a pole, but instead will immediately conclude that it is a man: although tallness can be inherent to both a man and a pole, movableness can be attributed only to a man. Tallness is inherent, thus, to both a man and a pole, but the tallness of a man is not identical to the tallness of a pole, it is only *analogical*, i.e., resembles the tallness of a pole. A knowledge of a similarity between the tallness of a man and the tallness of a pole presupposes knowledge of both a man and a pole, for which different types of tallness are attributed. If such knowledge already exists, however, a doubt about these objects may not appear, since knowledge eliminates any doubt. In addition, a doubt cannot arise either from a contradiction in testimonies, or from an erratic perception, or because of an absence of perception. In the case of contradictory testimonies from both sides, a doubt is misplaced because of a strong conviction. For example, a disputant claims that soul exists; his opponent objects: soul does not exist. Both do not doubt their claims. As for an incorrectness of perception and non-perception, this incorrectness itself contains a certain regularity: an irregularity can be determined only in respect to something different; it cannot be doubted in respect to itself, i.e., every incorrectness as such is correct. The same is also true in the case of an infinite doubt because of a continuity of a cause [of this doubt], as, for example, in the case of a remembrance of properties inherent to many objects; such universal properties exist continuously and that is why a doubt will be never eliminated.

In response, we want to mention that a doubt appears in a joint [combined] [re]cognition of universal and specific properties. A remembrance of properties

inherent to many objects becomes a cause of doubt if it appears to be not possible to obtain a strong foundation for clear and exhaustive knowledge about these objects; for example, when we have a general (non-specific) knowledge about two tall objects (a man and a pole), but do not possess a clear distinctive knowledge about each of them. A doubt arises only in the case of alternative testimonies. When a disputant and an opponent claim alternative opinions there is no point in not believing either one of them if we do not have clear knowledge about a given object. This is why an intermediator almost always doubts [the claims of both sides]. As for an incorrect perception and non-perception, [we have] a verbal trick here. An incorrectness is preserved until the objects which caused this incorrect perception happen to be eliminated. The same is true with non-perception. As for a possibility of an infinite doubt, its object, for example, a universal property, is not always recognizable, even though it still exists. Before [re]cognition of universal properties, a doubt does not arise; with a closure of [re]cognition, it disappears. (12)

A doubt is not an analogy; a doubt is an erratic likening, while analogy -a source of trustworthy knowledge.

VII. EXAMPLES OF EXPLICATION OF SOME PROBLEMS IN *THE NYĀYA-SŪTRA*

(1) A part (*avayava*) and the whole (*avayavin*).

It has been claimed sometimes that only parts are real, not the whole. For example, a tree is green in some places and yellow in others. If a tree is the whole then it cannot possess the general properties of greenness and yellowness simultaneously.

In response, Akṣapada says that nothing is open for perception if we deny [an existence of] the whole. Suppose, only parts are real. Since a part has no fixed dimensions [measurings] it may be divided into parts again and again until we reach atoms as the utmost parts. Atoms are formless and cannot be perceived. Therefore, a thing consisting of atoms should be formless and could not be perceived. This is why a reality of the whole has to be admitted [as existent] independently of its parts. In addition, a negation of the whole denies a singular. From a distance, of course, we would not see just one soldier or one tree, but troops and a forest. However, (the opponent remarks that) troops consist of separate soldiers as a forest is composed of singular trees. The same [can be asserted] about atoms: although a singular atom is not what is being perceived but instead a pot as a whole which itself consists of atoms, we still can assume: "This is *one* pot". Nevertheless, this is an incorrect [unfit] analogy, because trees and soldiers possess bodies [are tangible] and can be perceived [from a short distance], while an atom is not tangible and in principle cannot be perceived as something separate. It is certainly absurd to conclude that atoms can *be perceived in mass* if soldiers and trees are perceived in mass. To avoid an erratic

conclusion we have to infer from the analogy, namely, that, from the position of trustworthy knowledge, the whole is bigger than an aggregate of its parts, since it [the whole] is behind them [its parts].

(2) Atoms (*paramāṇu*)

Sutra 4-2-6 asserts that a total annihilation of things might never occur. Even if the entire universe (*pralaya*) were to be destroyed, things would continue to exist in the shape of atoms. An atom is that which is divisible into its parts. The idea that an atom consists of parts, because it is pierced by space (*ākāśa*) both from within and outside, is incorrect; it is based on an unfit analogy. The notions 'internal' and 'external' are not applicable to the eternal atom which is absolutely different from ('not similar to') an ordinary thing because an ordinary thing is subjected to an operation of 'includedness', while an atom is not. True, space is all-penetrating, but nothing can be destroyed or eliminated by it [by space], so the very question of external and eternal in pure space is senseless [does not arise]. The assertion that an atom ought to have parts because it is connected to another atom only by its parts is also an erratic analogue [generation], since it leads to an infinite regress of division into parts. Thus, the eternal, whole and non-divided-into-parts atom exists. Two atoms form a 'dyad', three dyads compose a 'triad'. Perceived things are formed as triads (2×3=6), i.e. as six-atomic complexes.

VIII. ANALOGY (*UPAMĀNA*) AND LOGICAL INFERENCE (*ANUMĀNA*)

Translating the term *upamāna* is a quite cumbersome and complicated task when the logic of *Nyāya* is being considered. Although the term has usually been interpreted as 'analogy', one should be aware that the *Nyāyàs* analogy or *upamāna* does not retain many similarities with what is traditionally understood as 'analogy' in Western philosophy and logic.

The etymology of *upamāna*: this word is derived from the root '*ma*', 'to measure'. Attached to it is a suffix which means 'an active performance' and a prefix signifying 'a gradual approaching, joining as an unfinished action'. This is why any literary translation of the term more inclined to be a 'submeasuring' [than analogy]. As we will try to show in our analysis, such a literal translation appears to best reflect the original meaning of this means of cognition. It is important for this term not only to be quite precise in expressing the meaning of this cognitive action, but that it can also be connected to notions which signify the correlated auxiliary cognitive actions and their results.

Dictionary meanings of *upamāna* are 'comparison', 'resemblance', 'standard of comparing', and 'something with what subject is compared'. 'Submeasuring' is one of the four prerequisites of *upamā* [Submeasurement], namely the one that represents an immediate and specific cause of Submeasurement as its result, i.e., as a resulting knowledge, or a fruit of Submeasurement. It has also been translated as 'analogy', 'transfer of similar characteristics', 'recognition due to

similarity', and 'assembling of commeasurement'. Perhaps in a certain sense it would be better not to give this notion a translation than to translate it as 'analogy'. Like in the case of the Greek '*syllogizomai*' (to re-sume, to weigh, to draw a conclusion, and to take into consideration) and '*analogizomai*' (to estimate, to try on, to consider in regard to something, to mark upon, and to find out a proportion) there is a similar correlation between the Sanskrit *anumāna* and *upamāna*. But in Western logical tradition, despite the etymology, both of these terms are related to different types of proposition (for instance, to propositions of predication, of different types of relation, and other utterances of inner logical usage). In the logical tradition of *Nyāya,* a specific *epistemological* category is reserved for anything linked with propositions, whereas in the analyzed Western *logical* case the operational aspect of *measurability* is accentuated. *Nyāya* is not a propositional logic. This is why in particular, logical constructions are not classified according to their 'truth-functions'. On the surface it looks as if the *Nayāyaikas* are trying to avoid a consideration of false statements. As a matter of fact, if a construction of knowledge has been completed according to the rules of the operation, the very problem of its validity disappears as an epistemological excess connected with a cognitive constructor. In addition, the only one true and reasonable move will be a proof of validity of the entire construction according to these rules, i.e., to various 'commeasurings'. In other words, the above-mentioned pair of notions is correlated as two different operations aimed at commensuring the reified knowledge's constructions. Henceforth, we will try to avoid associations with 'knowledge' (which is necessarily 'someone's knowledge) or 'true' (which is, again, always 'someone's truth' or 'truth for someone') in any word with the root '*ma*' and underline various aspects of commensurability. Thus, *anumāna* literally means an 'aftermeasuring', i.e., a procedure of action after the already cognized and unchangeable relation (standard or scale) of the commensurability of two things (or, according to their scaled indicator of their joint concurrence in one place). Perhaps, the sense of this procedure is in demonstration of the presence of commensurability to the others, but not to itself (that is why the Old *Nayāyaikas* distinguished an 'inference for oneself' (without an instance) and an 'inference for others' (with instance)). *Upamāna* means 'submeasuring', i.e., a search for correspondence in the properties or relations between a fact of perception of a certain concrete thing and a verbal testimony about some other thing (whether a concrete one, or a class of such things -it is not important) similar to that certain thing mentioned by the name which has to be related to this concrete perceived thing, even if only a similarity with a prototype has been correctly established (commensured). In other words, in the first case, a commensuration is undertaken to verify whether a known relation is suitable for this scaled proportion and whether it can be distributed to all the relations of a given class. In the second case, such a relation has yet to be certified (or, at least, discovered). At the same time, an important role of an 'instance' (*dṛṣṭānta*) within the operation of commensurement has to be underlined. If this instance is impossible to find (as in the case of an empty

logical class, for example) then we have to admit a non-commensuarability. In the case of a 'proposition' ('logic'), a necessity of such an instance is not so obvious and an emergence of a subject of an empty logical class is not forbidden (as it happens to be a non-commensurability), since it does not destroy a propositional construction which has no ontological content (as a matter of fact, propositional logic does not hold a difference between a level of language of description and a level of operation; it may be seen as a misfortune of the entire Western logical tradition).

Therefore, a 'submeasuring', correlated to a 'submeasurement' (*upamiti*, in the meanings of both the process and the result of submeasuring), and contrasted to an 'aftermeasuring' and its results, is an operation that belongs to a class of 'commensurings' (*pramāṇa*). It implies a procedure of correlation according to a similarity of a certain thing with a known prototype, on the basis of a verbal testimony of an expert about the presence of such a similarity between a prototype and a concrete perceived thing which becomes a case of establishing the type of similarity.

EDITORIAL NOTES

(1) This explication of Zilberman's can be put into a broader context of modal-methodological analysis in his '*The Canonical Subject in the World of Knowledge*' where Zilberman compares the systems of *Nyāya* and phenomenology. For such a comparison one of the key problems appears to be an explanation of the idea of experience. Zilberman therefore undertook an analysis of this idea through the concept of Commensurings:

"What kind of 'thing' can be 'commensured' before exertion of the pragmatic desire to attain it or to get rid of it? Certainly the *idea* of experience only.

Indeed, the 'commensurings of *Nyāya* (namely, Perception, Aftermeasuring, Submeasuring and Testimony) are applied not to a natural 'thing' as existing *by* itself and *for* the Commensurements. They refer to the ideal object designated as 'experience'.

Thus, naturalization of knowledge in experience is shifted by two steps. Of course, an exerted consciousness can know its effort to be fruitful in a 'natural' way, i.e., intuitively. But here, this move is prohibited or, rather, impeded: for the immediacy of cognition is mentioned as just now produced: (V)N. And this production is called fruitful when referred to the achieved results. Such reference is based on the *idea* of experience, ((I)V)N which turns us back to the accomplished commensurings: (((V)I)V)N

Such is the composition of the axiomatic introduction of the cognitive experience where 'the idea of experience' is an element of the metalanguage of description of the cognitive experience which is introduced before the emergence of the language itself. This anticipation, of course, makes sense of an axiomatic approach.

Now what about the set of suggested evaluations of the cognitive situation, i.e., of axioms 'existentialized' in knowledge?

[This is how Vātsyāyana puts it down in the Introduction to his *Bhāṣya*:] "The 'object' or 'thing' (cognized by means of the Commensurings) is of four kinds: viz. either (1) pleasure, or (2) a source of pleasure, or (3) pain, or (4) a source of pain. These objects of Commensurement are innumerable; owing to the fact that the number of living creatures is infinite. It is only when the Commensurement duly operates with regard to an object, that due success can belong to the 'Commensurer' (who only then can have any idea of the object) - to the 'commensured' object (which only then can have its true character known), - and to the Commensurement (which only

then can lead to due comprehension of the object); because there is no possibility of the object being accomplished, so long as the most effective cause is not present (and it is the Commensurement which is the most effective cause)."

It would take a great deal of diligence to make this cumbersome passage clear. At any rate, however, it seems obvious that there we have encountered a very strange situation: correct commensurings of a thing are proclaimed to be available before the emergence (or 'condensation') of the thing itself. Thus the thing is given a chance to become the 'commensurable' only 'when the Commensurement duly operates'. The knowing Subject, 'the Commensurer' (i.e., *ātman*) is also not available yet - until due Commensurements are supplied. The situation of measurement and the very desire to exert the cognitive faculty to reach the thing or to get rid of it -are also not known. All this evidence confirms our conjecture that the Commensurement is an element of meta-language before the language is possible." ('The Canonical Self in the World of Knowledge', in *The Birth of Meaning in Hindu Thought*, pp.188-189)

(2) Except this one, another significant assertion can be made from this analysis of the Commensurement, namely, about the Self in *Nyāya*. Zilberman deduced this assertion in his *The Canonical Self in the World of Knowledge* as the following: "Divisibility of the Self in *Nyāya* is explainable from the outside: some problems of knowledge, say, in the aspect of its activity or elusiveness, are beyond its competence and can be back into *Nyāya* but only as external ones. It can be measured from the outside as well - and for this purpose Four Commensurings are introduced. But it still remains for us to comprehend how the world of *Nyāyà*s Self is built so that it ventures to secure its integrity while being both explainable and commensurable from the outside.

The main problem which we are facing here, is the following: it is suggested that, when all Four Commensurings work conjointly, not only the 'object' (the 'Commensured') will emerge but the 'subject' (the 'Commensurer') will get condensed - as it were the fabulous '*homunculus*' in a retort of the Commensurings." (*Ibid.*, p.197)

(3) Although this part of Chapter II was left unfinished by Zilberman, it can be enlarged, it seems, by the fairly extended passage from *The Canonical Self in the World of Knowledge*. This passage explores the above mentioned idea of experience (see Note 2) in *Nyāya* and in particular in tractate *Vārttika* by Uddyotakara: "Now let us turn to the *Vārttika* and follow its course. Uddyotakara considers correct commensuring of knowledge as a necessary and sufficient condition for attaining the Highest Good. All the visible is good (remember the lamp! . . .). All the invisible is pain [reference to Wittgenstein's conjectures of the double meaning of the utterance "Pain! . . ." in his *Philosophical Investigations* - Ed.]. A scream of pain which failed to be comprehended as a sign of pain, disappears in the endless vista of the natural. But the world can be filled with things which reflect light ('good things'). And this world, when realized in knowledge, becomes the *Summum Bonum*. The Commensurements impart the production of the well-built and completed universe.

In the perspective of this attainment, the states of Man (ready to become typologies) are considered: wise-unwise-doubting-erring. They do not comprise dual or other numerical oppositions, since the Commensurings, when correctly enacted, eventually destroy or sift away the last three as *natural* constituents of the idea of experience. The *vision* of Good remains a 'knowledge assembly' of a set of the arbitrary supposed evaluations of the cognitive situation. The world of the unwise, doubting and erring is disposed - factually, through the procedure of logical negations.

Disposal of the three is undertaken in relation to a certain number (21) of 'extentional spheres' (*Viṣaya-dhātu*), including the body; the six sense-organs; the six cognitions of the contact data for these organs; pleasure; and pain.

The world built in regard to this disposal is declared to be the world of *Dharma*, or the 'Good Canon'.

But where can the 'material for disposal' and the world actually constituted in the 21 'extentional spheres' be taken from? Who would supply *Nyāya* with a 'meta-universe' where 'all the extra' has to be carried away or reduced to the 'good things', in accordance with the rules of logical actions?

This would be that very world which the 'physics' of *Vaiśesikā* offers at the disposal of *Nyāya*. *Vaiśesikā* is responsible for placing objects within the *idea* of experience.

Thus, the body is considered as 'pain' because it is presented as a 'receptacle' (*āsraya*) of any painful experience. All possible experience of a certain kind is bestowed within the body. For the *Nyāyaika*,

therefore, here lies the source of his logical theory of relations which is embedded in this physics (*dravyam*) just as for the geometrician the idea of circle is embedded in his drawing. Meta-physically speaking (here 'physics' = 'logic'), the adjunct of a logical relation (*pratiyoḡī*) is an 'extentional sphere' which has to be spared from 'all the extra', while the subjunct (*anuyogḡī*) is a receptacle for the content spared in the *canonized* way.

Sense-organs and their cognitional object are disclosed in the same manner, for they are given 'from the outside' as general prerequisites (*kārāṇi*) for any painful experience.

Then appears an important methodological statement of an axiomatic nature: pleasure is defined through pain. But this is not because pain is actual and pleasure is transient and fictitious, as the Buddhist would say. Had this turn been over-looked, we would be drawn back to the ability to pass judgment, with its natural quality of making significative oppositions (say: 'pleasure' can be signified as '+' and 'pain' as '–' or *vice versa*). In this case, canonization of the Good would never be achieved in a real sense. As a matter of explication it is said in *Vārttika* that 'pleasure' is invariably associated with 'pain' for all possible cases experience of the pleasant results in the experiencing painful (say, when the pleasant is lost, etc.). 'Pain', however, is considered in and by its own nature - for 'nature' in *Nyāya* is just that very 'ungood thing' which has to be disposed of through Commensurements from the idea of experience.

So, to build knowledge of the Highest Good, it is essential only to get rid of pain, rather than to make correlative 'pain' and 'non-pain', as the Buddhist would propose. But is not the 'painless universe' is thing with the same quality as the 'sky lotus' [i.e. something not really possible - Ed.]?

If so, then axiomatics of *Nyāya* is refuted at its very root. Or, rather, it is sublated as an Euclidean universe by non-Euclidean geometries. Well said, but in this case, what should be done with the utterance: 'Pain! . . .' which was suggested to be virtually false?

The author of the *Vārttika* reminds us that the experience of the universe was given from the very beginning as a non-natural one. He points out that not only 'things' but the 'commonality' (*samanyani*) of the 'extentional spheres' have to be commensured. Thus, for example, we can mistakenly take nacre for silver. But as a matter of fact, we are taken 'nacreness' for 'silverness'. Naturalness of the knowledge of nacre as silver is not asserted. It is essential that truth or falsity are ascribed not to experience as such but to the *Vaiśeṣikàs* idea of experience (in this case, to the *Vaisesika*'s idea of 'commonality' (*sāmānya-padārtha*)). Here lies the import of the statement: ". . . it is well known that the generalities are apprehended through the *real* Commensurements; and through the unreal Commensurements also generalities are apprehended. Thus the real Commensurements induce the generality of nacreness over nacre; the unreal Commensurements, the generality of silverness over nacre."

Consequently, everything depends on the initial axiomatic conditions of introducing the experience rather than of the experience itself. And these conditions are reckoned on the basis of taking over from the *Vaiśeṣika* (who is preoccupied with the experience as such) the idea of *generality* in experience. In other words, regulations of truth and falsity are set in advance elsewhere. Had we not had this set, we would never convince ourselves of the mistake: 'This is not silver, this is nacre'. For the most natural experience can lead us only into the endless regress of approximation.

But what are these 'initial conditions'? If some code of generated facts or factualized things ('knowledges') is implied - then it refers us back to 'naturalness', in the sense of the nature of the category of logical generality (*jāti*).

Following the *Vārttika*, the import of the doubt is:

There can be no fruitful exertion without commensurement;

There can be no commensurement without exertion to commensure.

The answer: Uncertainty in axiomatics indicates a logical circle. The fact is that the universe is beginningless, so that the state of generation cannot be described in natural terms. This is just the state of our consciousness - and there is no point to look for elements of the language for its description. It is completely up to us to choose, however, whether to naturalize the 'naturalness' as a state of the consciousness - or to build it into knowledge in the following order:

Correct Commensurement - fruitful exertion - the fruit (knowledge). To make this order comprehensible, one has to perform a reversal of the result (*artha*). The word '*artha*' is introduced and used in *Vārttika* with the different connotations:

(1) that which is to be gotten rid of or avoided;
(2) the direct cause of the avoiding of (1);
(3) that which accomplishes (2);
(4) the ultimate end sought to be attained.

Thus the Commensurement turns out to be the root of the whole process:

(((V)I)V)N)V
3 2 4 1

Now let us watch how this succession is kept in the technical part of the Introduction to the *Vārttika* -where the meanings of the two key words of the *Sūtra*, 'the 'Commensurement' and the 'result', are demarcated.

I. *Pramāṇataḥ̀p`ḥ*: the term is used with the affix of the non-declinable form `*ṭasi* which has the sense: "every thing which refers to the Commensurement" (see *Panini* 5.3.7). This use seems to be as prudential as it can be - for it reserves for all formal qualities as demanded by the axiomatic character of introduction of the term. Thus it implies the *plurality* of Commensurements as such. In the meantime, the use of a declinable form would necessitate immediate qualification of their precise *number* and would involve us in a premature discussion at the level of experience; *how* many; one, two or more. The non-specification of the case - the *Instrumentalis* or the *Abbativus* - pursues the same goal. It means that the causative character of Commensurement has to be certified later. It is proposed as a 'theorem', as one among the possible *ontologies* with which the logician is not interested on his formal constructive efforts. Consequently, the non-declinable form is fruitful in the sense that it allows us an escape from the untimely and circular discussions of the metaphysical kind and follows a purely constructive line by pushing far (and at different levels) the problems which have to be solved by extra-logical means. As a matter of fact, these problems are irrelevant at the *operational* level (compare this with Nagel's logic without metaphysics')." ('The Canonical Self in the World of Knowledge', pp.197-200)

(4). This part can be clarified by a quotation from another Zilberman's text, 'Dialectics in Kant and *The Nyāya-Sūtra* 'from *The Birth of Meaning in Hindu Thought*:
"And then Vātsyāyana comments: 'Cowhood is a genus which underlies all cows. Seeing a cow somewhere, we acquire a general notion of cows, i.e. derive knowledge of cowhood. And this general notion is a concept which enables us in all subsequent occasions to recognize individual cows.'

Although *jāti* is introduced here as an ontological category, a deeper penetration into its meaning shows that this is rather a case of the hypostazed epistemological category. The literal translation of this *sūtra* is: 'Generation is what enables self-endowment of extraction of the identical.'

Here *ātmikā* means 'the factor which enables something (i.e. *jāti*) to be self-endowed'. *Prasava* means pressing-out, the process of continuous pressing, extraction (of juice or essence), distillation, preparation (of wine, etc.) and the like. *Samāna* means identical, homogeneous, the same. Consequently, 'generation' refers to a specific act of cognition by which we, as we were, extract what is identical in different objects of cognition. Therefore, *jāti* is identified in the above-cited passage as a specific category of reasoning (the act of cognizing of sameness), rather than an ontological character inherent in things themselves. This preference means that there the differentiating orientation of reasoning is suspended. Now, if we recall again the opposition between experience and judgment, it becomes explainable why in *Vaiśeṣika*, closest to the *Nyāya* system of philosophy which plays the part of the 'empiricist' to the *Nyāya* logic, *jāti* completely coincides with the objective category of sameness (*samānyaṃ*) included in the *Vaiśesikạ* system of six (or seven) *ontological* categories. It is quite remarkable that, in exchange for this polarization of the split meaning of *jāti* at the level of reasoning, we observe the contrary displacement of meaning on the level of reason, i.e. at the systemic level: taken as the whole, *Nyāya* obtains its peculiar logical *telos of identification* of seemingly different ideas, while *Vaiśeṣika* sees its total goal in *differentiation* or *specification* (this is the literal meaning of its name) [. . .] In *Nyāya* itself, *jāti* is used in its epistemological function of reasoning while its hypostasis (or 'reification') is transferred into *Vaiśeṣika*; [. . .] Here we observe the real fact of the divided application of one and the same system of categories in two different schemes -

ontological and epistemological - exactly because, to use the Kantian language, this is the case of illegitimate application of reasoning to thinking in the categories of reason; i.e., *objectively*. The immanent antinomy could be avoided only by splitting the philosophical function of the category between two different 'philosophical subjects', that is, two related systems: the empiricist and the logicist. The original contradiction, however, was not removed by that division, it was only suspended. But at least, now we understand that its source is found not only in the empiricist application of reasoning but also in the *a priori* suggested unity of reasoning subject . . . This brings us back to the very origin of logic in historical perspective, temporarily abstracted above, namely, to the methodology of dispute as that actuality in which such a kind of unity could never happen. Thus the questionable unity was attained only in external symbolic logic, that is, in the structure of *formal logic* discovered in the actuality of dispute. This logic, therefore, is not at all 'without metaphysics' (to use the positivist idiom of Ernest Nagel). Now we understand that its 'meta-physical matrix' was drifted away, into the other system - and there it also changed its philosophical status.

But even inside of its own structure, logic cannot be an object in the empirical sense, let it even be phenomenal rather than historical experience in question. *Vaiśeṣika* obviously appears in relation to *Nyāya* as a system of Empiricism (which, by the way, is *not by itself*, and this can be demonstrated in all its particulars). Hence the *Vaiśeṣikà*s scheme of categories must seen to be an ontology to the *Nayāyika*. But this does not save *Nyāya* itself from its inner antinomicity. It follows from the cited definition of *jāti* as 'genus' that here we have exactly the case of illegitimate application of reasoning in the sphere of thinking, employed in the process of cognition. 'Genus', 'generality' -they are mere cognitive constructions which cannot rest on the indication of facts if used as instruments of fact-finding. That transcendental application of reasoning requires its *immanent* critique. And that kind of critique is performed in *Nyāya* by differentiating the second, 'sophistic' meaning of *jāti*.

Jāti described as futility' appears exactly as a category in which all *possible* constructions of reason (like 'generality', 'heterogeneity', etc.) are criticized immanently, i.e. by their logical inversion from reason, and which tries to work in accord with the rules of reasoning, that is, into the structure of logical inference in which their 'futility', 'non-productivity', etc., is finally demonstrated. Thus logic is beaten by logic. In other words, in the second use of *jati* we already have not the antinomies of experience but the genuine and real dialectical antinomies of logical thinking.

Jāti in its alternative meaning is defined as 'false analogies', that is, a category which includes an indication of some kind of groundless generalization of the rules of reasoning. Besides that, it also carries out a *specific* function. If an unqualified disputant applies it carelessly, he gets himself more and more strongly involved in fruitless discussion. This situation corresponds to what we look as a point of departure in our analysis of Kant's dialectics which is also related to the rules of dispute on the basis of a critique of the individual faculty of judgment." ("Dialectics in Kant and *The Nyā ya-Sūtra*", pp.154-156)

(5) Continuation of this passage may be taken from another text of Zilberman:

"Properly speaking, the form of *vāda* shines forth already in the 'logical' part of the 16 categories. Its presence, naturally, becomes recognizable in the category of *doubt* (*saṃśaya*). Both in the case of inability or in that of impossibility to remove doubt, discussion is unfolded within the problem which is formally closed at the ninth category of ascertainment (*nirnaya*). It is exactly the point where the above promised demonstration of the system of *Nyāya* dialectics as exhaustive and complete belongs.

The formal structure of dialectics itself is reflected in the 'logical' part of *Nyāya*. Every proposition is explained, according to *Nyāya*, as existing not by itself but in a pair with its opposite. The reflection of this is called *vimarśa*, which literally means 'divided construction', 'mental touch', etc. (see N.S. 1.1.24). Thus *vimarśa* is a reflection of the dialecticity of thinking in the matter of discourse and in language. It obtains its technical meaning of 'philosophical reflection' exactly because the mark of self-certainty is removed by this 'divided touch' from both the propositions constituting an antinomian pair in their immediate content. This removal, however, is formally reflected in just one of them, arranged within the inferential structure as its external form (*avayava*), while the other member of the pair is turned to absurdity (*tarka*). So that the truth of the latter is suspended and ascertained (*nirnaya* means both 'suspension' and 'ascertainment', as in the German, *Aufhebung*) in the thesis of the first, the logical one. Thus the formal structure of discourse is unfolded in the

following steps: 'doubt', 'attachment', 'instance', 'theory', 'inferential structure', 'torgue', and 'suspension'. This genetic series overlaps the logical one and goes beyond it.

Now what is essential is not the formal structure of discussion but its material content, distributed between its components, 'thetical' and 'antithetical' correspondingly. In so far as we are interested in the essential (rather than propositional differentiation within the logical structure), it can be explicated only by genetic analysis of *vāda* as a productive discourse. For this analysis we have to immerse *Nyāya* back within the original matter of discourse and explain *why* there a necessity once appeared, to give a discourse a form of dispute, *how* the particular task of methodology of discussion was singled out, and in *what* order, in the process of the fulfilling that task, 'formal logic' as a canon of truth, separated from 'dialectics', as a negative form of 'sophistry' however preserved it may be in its function as the organon of cognition. [. . .]

Nyāya is a process of logical demonstration as a whole. In both its aspects it appears as a united system of activity, directed to the search for *rules in general*. But these rules, as we have seen, always have an objective and a subjective side. That is why *nyāya*, in its systemic form, must serve both as objective logic of activity with the given content and as subjective formal logic. Objectively it is included within a larger scheme of culture and social production. As for the subjective side, which is now our immediate interest, its goal is found in a certain kind of inner production. The product of the inner production of *Nyāya* is *formal logic* of a specific construction. The procedure of *nyāya* literally means 'reduction' or 'making a canon'. The product of reduction in *nyāya* is what is called knowledge with a given content (*jñā na*), represented in its formal structure by the 'rules of logic'. The main instrument of this reduction is known as *avayava*. A derivative from the verb *avayava*, 'disconnect', 'unyoke', 'dismember', 'single out', 'loosen the connection', etc., *avayava* means 'member', 'isolated element', 'part', 'suspension in connections'. It is noteworthy that in *Nyāya* there is no special term for the structure of logical inherence (like Aristotle's syllogism'), although the procedure of logical deduction as an instrument of cognition (*anumāna*) is named. Instead of this term, the plural of *avayava* is used, i.e. 'the members' (5 members in total), 'the lost connections', 'disconnected parts', etc., namely:

(1) What is proposed for cognition (*pratij̄ñā*);
(2) The logical reason of inherence (*hetu*);
(3) The visual aid (or content-bearing example, *dṛṣṭānta*);
(4) Application (*udāharana*);
(5) Conclusion (*nigamana*).

On the other hand, this knowledge which is constructed as a totality with the manifested logical structure is called *avayavin*, 'the articulate'. *Avayavin* means a whole composed of the suspended connections, a knowledge with the articulated parts or 'lost' connections. And in this latter sense it is different from a simple unity.

The connections 'lost' in that knowledge are transferred to the level of means or implementations which secure its wholeness. This can be illustrated as follows. If we have to repair a broken mirror we can use glass, pieces of wire or any other substratum connecting these pieces together. The only formal requirement for our work is that the repaired mirror must look like one piece. That is, all the connections introduced into its substance in the procedure of repairing must be 'lost' there, must disappear from the surface level. No wonder that *nyāya* is further defined as an inquiry in the heterogeneous, contradictory objects with procedures which become members of complete knowledge only if suspended (*nirnaya*). The ascertained knowledge must always include all these 'members with lost connections', i.e., it must be 'foremeasurable' (*prāmānyaṃ*) in the specific structure of *anumāna*: 'epimetrics', `*upamānà*, 'hypometrics', *pratyakṣa* = sense-certainty', and *śabda* = verbal testimony'. It is not difficult to understand that sense-certainty and verbal testimony must be prior to 'epimetrics' (logical inference) and 'hypometrics' (analogy). Inference based on sense-certainty and testimony is called *anviksa*, which means 're-view'. That is, re-view of what has been viewed by sense-certainty and verbal testimony. *Anviksa* is secondary knowledge, hence that inference which is contradicted with self-certainty and verbal testimony is pseudo-*nyāya*, false reasoning.

Both true and false reasoning have seemingly the same material composition, that is, discussion (*vāda*). But can *vāda* be organized as 'true' only?

The specific field in which *nyāya* works as a part of the system of social production is *socialized speech activity*, or *conversation (kathā)*. *Kathā* means 'conversation *with* somebody', not mere 'talking'. The verb *kath* translates as 'to inform', 'narrate', 'address somebody', 'refer to somebody', and implies the 'recipient-directed speech'.

Kathā is a message sent by one of the participants of the discourse and it always intentionally presupposes the opposite party. But *Nyāya* is different from linguistics, because it is interested not in the naturalistic description of the facts of speaking but in the activity of thinking involved in speaking. The goal of *Nyāya* is not in the systematic presentation of facts how people talk (this is business of Panini's linguistics). Its subject-matter is the *logic* of conversation as specific human activity structured by the difference between the disputants, by divergence of their sociological and ideological positions, etc. That is why discussion (*vāda*) is never simple: it always exists as an interfacing of at least two *kathās*. And knowledge must be singled out of this fabric of discussion as alienated from both its sides or parties (*pakṣas*), carried out of the sphere of speaking by *nyāya*, which presupposes the notion of 'logical truth'. *Kathā* is defined more precisely as 'polemical conversation', exactly having this pointedness in mind.

Kathā is not a *dialogue* in the Platonic sense, i.e. something objectively staged and separated in genre. It is conceivable only as a component, a part of dialogue, like a thread in the fabric which is woven by one of its parties. Compare N.S., 1.2.1.: "*Kathā* is the adoption of a side by a disputant and its opposite by his opponent" with what Hegel called the 'essence of dialectics' in Part Two of his *Science of Logic* (Section, 'On the Porosity of Matter').

This socialized organization of polemical activity can be of three different kinds:

(1) *Vāda*, lit. 'speaking about something' (in contrast to *kathā*, 'talking with somebody'), 'thematic discussion', 'statement with a certain content'. In the case of *vāda* we recognize a 'gluing together' of the speaking subject and what he is talking about, i.e. the object of his statement in the matter of discussion. This aspect of 'thematic speaking' or 'speaking about' is important. Correspondingly, we have two different words: *vac*, 'to speak, say', and *vād*, 'to speak about something'. Besides, *vād* means 'to cause utterance', 'to provoke an answer', 'to play with words, etc., i.e. it always indicates the socialized orientation towards the other. In the extended sense *vāda* means any contestable statement, thesis, argument, doctrine, conception, explanation, contradiction, accusation (like the Greek *kategorema*), and even the whole philosophical system pointed against the other. In this latter case, its dialogicity is taken into conceptual framework. This is certainly true about the *Nyāya-vāda* itself. The content and structural composition of the *Nyāya-Sūtra* are by no means occasional. They are produced historically from the methodology of discussion. Hence the final definition in N.S., 1.2.1.:

'Discussion (*vāda*) is the adoption of one of two opposing sides. What is adopted is analyzed in the form of five members, and defended by the aid of any of the means of right knowledge, while its opposite is assailed by confutation, without deviation from the established tenets.'

(2) *Jalpa*: 'sophistry', 'prattle', 'idle talk'. Like *vāda*, it also has a definite goal of gaining victory in the dispute. But this does not necessarily mean attainment of truth by its establishment. Hence the means of sophistry are *chala* ('quibble', 'snare'), *jāti*, and *nigrahasthāna* ('situating the defeat').

(3) *Vitaṇḍā*: 'cavil', 'striking back'. If it advances a proposition of its own, it ceases to be itself; if it does not, it becomes a meaningless jargon.

Properly speaking, *jalpa* and *vitaṇḍā* are sorts of *vāda*. Taken by themselves, they also incorporate two or more *kathās* and are instrumental in continuation of the dispute. Owing to them, the live discussion differs from a ready-make logical structure. The logical form is an illusion, only an appearance of the methodology of discussion. The elements of dialectics are structural units, too. But they belong to the deeper level of approximation to the reality of discourse than the elements of formal logic. Relatively speaking, the elements of dialectics are opposed to the elements of formal logic as speech is to language (in the structural sense), while the 'ontic' matter of discussion is in the same sense opposed to the elements of dialectic. Having this double reference of dialectics in mind, we can now explain how formal logic was fully substantiated in the culture of reasoning.

The answer to this question is found in the fact that *kathā* is subdivided into *vāda*, on the one hand, and *jalpa* and *vitaṇḍā*, on the other. It is very important that *vāda* is sociologically marked as a 'thematic dispute with an elder' (e.g. teacher), i.e. as the 'pedagogically accredited dispute'. with the final of unobstructed transmission of knowledge within the culture of learning. This feature of vada is externally manifested as 'truth function'. Its objective reference, i.e. orientation towards the object of cognition (*prameya*) is a secondary form of expression of the practical sociological employment of *vāda*. The highest goal of cognition in the Vedic civilization consists in maintaining the substance of activity within the culture of learning, i.e. in fastening the non-interrupted chain of tradition between teacher and pupil. Thus *avayava* is a result of dismemberment and articulation of the unity of discussion not in general but only when the discussion takes place between the teacher and the pupil, i.e. if it belongs to a particular system of their mutual activity of thinking. The wholeness of inferential knowledge rests on the thematic giveness of the facts of learning and of transference of knowledge. The logical structure of inference appears as a specific instrument which binds the teacher and the pupil in their united activity. Thus Indian logic emerged as a specific pedagogical means, as an implement of teaching and learning. This cannot be asserted even about Aristotle's logic which is merely descriptive, turned toward the object [. . .] Aristotle's interest in logic was stimulated by his studies in biology. The goals of classification (in general and especially of species) and description (in the subject-predicate scheme) are external to his logic, and screen its immediate nature which is social and communicative. But that immediacy always remained evident in *Nyāya*. Its inferential structure was preserved five-membered and never reduced to a three-membered scheme as in Aristotle and the Buddhists. And this was not because of some psychological or purely grammatical reasons (five is the number of the main *karakas*, or primary cases, in Sanskrit grammar) but exclusively owing to cultural circumstances. After all, the Buddhist used the same language and presumably had the same psychological background as the Vedic Indians. But since they abandoned the Vedic scheme of learning, the structure of their logic also changed.

In contrast to *vāda*, *jalpa* and *vitaṇḍā* are the forms of talk between *rivals*, i.e., in the situation when teaching and learning are out of the question. Consequently, here the meaning and form of truth could never be singled out. It should be noticed that the notion of truth or untruth was introduced later to mark this particular situation as different from *vāda*. The cognitive interest in things as objects of cognition could never be developed by itself or merely from idle curiosity. It could emerge only from the intermediate level of 'sophistic' formations: mainly from *jati*, which also means, by the way, 'provoking the opponent to continue the dispute'. The same tendency is differently reflected in the statement of the *Vedānta* that only false views generate the activity of cognition. It is not difficult to see that *jati* is similar in its function to *khyāti-vāda* (lit. 'dispute talk') metaphysics of *Vedānta*.

The dynamics of *vāda* consists in counterpointing thesis and antithesis by imposing the forms of contradictory attributions, located in one and the same substratum. For instance, Thesis: "The soul exists", Anti-thesis: "The soul does not exist". Two contradictory statements referred to different substrates do not form thesis and anti-thesis. Then the same strategy is conveyed, by analogous transfer, into the subject of discussion itself (because it would be noticed in the case of direct attribution), i.e. into thinking generated by contradiction rooted not in the objects but in the subject-matter of discussion itself. Thus we have *jāti*, with attributions deliberately turned away from the objects.

In *vāda*, the thesis is defended by *pramāṇas* and the antithesis is refuted by reduction to absurdity, by the negative dialectics of *tarka*. When one party is silenced in the process (i.e. its *kathā* exhausted) the thesis stays as proven by the opposite side. Hence in *vāda* there is no room for a 'statement of defeat' (*nigrahasthāna*). Such a place exists only in *jalpa*. This, again, is explained by the fact that *vāda* is a process of uninterrupted transfer of knowledge. Its effectiveness as a learning aid is guaranteed by the complete formalism of the truth of whatever is transferred in it. As mentioned above, the only form of *nigrahasthāna* which is possible therefore in *vāda* is contradiction of logical reason (*hetvābhāsa*). Marginally admitted are such forms as 'saying too little' (N.S., V.2.12), when one of the members of the inferential structure is missing, and 'oversaying' (N.S., V.2.13), when more than one reason or example are used. In all such cases, the structure of the logical formula is

impaired. Both Gautama and Vatsyāyana indicate that *vada* and *jalpa* are genetically inseparable. In *vāda* the thesis is established and antithesis disproved by different *pramānas*. The main function of *jalpa* is negation, and no *pramānas* would work there. If in *vāda* the thesis is proved by *pramānas* and the antithesis is disproved by *tarka*, then in *jalpa* the same is obtained by *chala*, *jāti* and *nigrahasthāna*. None of them can establish the thesis directly, because their proper function is negative. But indirectly they help to disprove the antithesis. Thus *jalpa* in general is dialectical *aid* for *vāda* (see N.S., IV 2.50-51)." (*Ibid.*, pp.172-179)

(6) Another grouping of *jāti*, as well as another reasoning on this topic, can be found elsewhere in Zilberman's texts:

"All *jātis* are formed in accord with one and the same principle of uniting contradictions (*coincidencia oppositorum*) by their '*mental* balancing (*sama* = 'same'). It is quite clear that this balancing is only mental, speculative, because in experience and reasoning, all such contradictions are logically marked as non-coinciding. [. . .] *Jāti* literally means the process of generation, construction, production, as well as something generated, constructed, produced in that very process. Such an ambivalence in use is possible only for purely mental construction (cf. Aristotle's *De Anima*, III.5.430a.20;431a,I,st ff.). Hence *jāti* is a typical *vicalpa*, or 'divided construction' of thinking.

Now, what is the *matter* used in this special generation'? In his commentary on *The Nyāya-Sūtra*, Vātsyāyana indicates that *jāti* means whatever reply is provoked or called into being by the reasoning advanced by the opponent. It is applied to negate the logical ground proposed by the disputant. Where reasoning brings forward a resemblance to the instance (*dṛṣṭānta* = the 'completion of what is seen' or 'for the sake of what has been seen'), opposes that reasoning by bringing forward the difference from the instance, itself or *vice versa*. Properly speaking, *jāti* works not through varieties of oppositions themselves by means of resemblance and difference but exactly because the one who uses *jāti* offers opposition without determining the inferential relation of the two attributes in the instance. The inferential relation of the two attributes being grasped as established in the instance, the attribute which is determined as the means of demonstration is adopted as the reason, and not mere resemblance nor mere difference. But in *jāti* any logical reason can be negated by application of *both* instrumental means used in development of that kind of reasoning, although this negation is done, of course, selectively with reference to the case. Thus *jāti* means deliberate ignorance of the law of contradiction used in formal logic of reasoning. More correctly, *jāti* means insistence on contradiction as *inherent* in the transcendental logic of reasoning, in contradistinction to any formal logic of reasoning. By opposing the familiar instance, reason does not rely on experience. There is nothing mysterious, illegitimate or strange for the Western mind. It was quite clear already to Aristotle that the data of perception are never immediately present in reasoning: cf. *De Anima*, III,8,431b,25-432b,I):

'It follows that the faculties must be identical, if not with the things itself, then with their forms. The things themselves they are not, for it is not the stone which is in the soul, but the form of the stone. So that there is an analogy between the soul and the hand; form, as the hand is the instrument of the instruments, so the intellect is the form of the forms and sensation the form of sensibles.'

Here too, the reason *mediates* the empirical data as its proper means of opposition to reasoning and formal logic, i.e. it employs itself as an *instrument* which prevents the transcendental application of reasoning in a non-symbolic sense.

And, of course, continues Vātsyāyana, exactly because of that *jātis* cannot and should not be included in the means of logical demonstration. They do not succeed in refuting the opposition. But they impart some new quality to the logical demonstration by making it effective from the negative side. Their common function is to equate or to reduce the opponent's reasoning to the same class as their own - and thereby to bring in question the legitimacy of the concept 'class' itself. In doing that, to oppose similarity as a matter of logical ground, it suffices to employ similarity, too. Thus (1) to oppose resemblance to resemblance as reason:

'The soul possesses action, because it possesses volition and *aḍṛṣta* (ethical feeling) which is the cause of action, in the same way as does a pebble possesses action as it is shot from a catapult which is a cause of action.'

This demonstration by means of resemblance is opposed by the following equality based on resemblance:
'The soul does not posses action, because it is all-pervading, in the same way as the sky, being all-pervading, does not possesses action.'
And no special reason exists to determine the validity of the one as against the other conclusion. In the absence of such a reason the opposition counteracts the demonstration and stimulates further search for the logical sufficient reason, i.e. the productive logical work of reasoning. [. . .]

To oppose a content-bearing difference between (a) resemblance and (b) difference, one needs *jā ti* both of resemblance and difference:
'(a) The pebble shot from a catapult is finite but not the soul is finite, therefore the soul does not possesses action like the pebble.
(b) The sky is inactive because it does not posses the cause of activity, but the soul possesses the cause of activity, therefore it is not inactive.'
The common reply to these antinomies of reason is that the thesis or the counterthesis is established in the same way as a particular animal is established to be a cow through its possession of cowness. Antinomies arise where the demonstration is based on mere resemblance or mere difference, and not on the possession of the distinctive attribute of the character. An animal is established as a cow not merely through its resemblance to another animal possessing dewlap, etc., but through such resemblance *and* the possession of the particular and distinctive genus, viz., cowness. Similarity, mere dissimilarity to a horse does not establish a cow, but a dissimilarity of the characteristic attribute does.

Thus we are proposing to return to where we started: to the generic similarity which controls application of the analogies of similarity/dissimilarity. But we have reached this point of antinomy exactly because of inadequacy of the concept of genus as *sameness in reasoning*. Sameness in things cannot be taken as such (i.e. even as the idea of sameness) into the intellect, being 'the form of forms'. Do we therefore have to cut off of the definitions of the reasoning (resting on sameness), as proposed by Kant, to obtain the being of truth (*satyam*)? The limiting factor here is reliance on the experience of the senses . . . The key contradiction explains why, in the final scheme of *Nyāya*, logical inference (*anumā na* = 'epimetrics') is presented as dependent not only on sense-perception (*pratyakṣa*) but also on the structure of analogy (*upamāna* = 'hypometrics') which is implicitly included in the organization of the five-membered logical inference (*avayava*). Thus formal logic is limited by the analogies of reasoning *and* experience - and thereby carried beyond the limits of dialectical reason." (*Ibid*., pp.159-162)

This general introduction to explication of *jāti* is followed by another preliminary note which seems to be fairly important for understanding and interpreting *jāti*, as well as analogy as such. This note touches upon a correlation of *jati* and the categories of the *Nyāya* dialectics or the interpretation of *Nyāya* categories through their relationship to different groupings of *jāti*, or, more precisely, identification of 16 groupings of *jāti* as categories of the content-bearing logic of reason. The necessity of this note is significant also because the 24 classes of *jāti* analyzed below by Zilberman were proposed not in the original text of *The Nyāya-Sūtra*, but in the Vātsyāyanàs *Commentary;* and although Zilberman considered this latter classification to be more exhaustive, it has to be anticipated by the original division:
". . . first we have to consider the categories of the *Nyāya* dialectics. They include:
(1) Six *jātis* relative to the *sādhya* (what is to be established) and the *dṛṣṭānta* (the instance) as elements required in the structure of inference (V.I.4.-6); (2) those relative to extension or non-extension of *hetu* (reason) to the *sādhya* (*sūtras* 7-8); (3) those relative to regression and counterexample (*sūtras* 9-11); (4) those relative to non-production (*sūtras* 12-13); (5) to doubt (*sūtras* 14-15); (6) to contradiction in the subject-matter of discussion (*prakaraṇa*) (*sūtras* 16-17); (7) to non-reason (*sūtras* 18-20); (8) to presumption (*sūtras* 21-22); (9) to non-difference (*sūtras* 27-28); (10) to demonstration (*sūtras* 25-26); (11) to cognition (*sūtras* 27-28) (12) to non-cognition (*sūtras* 29-31); (13) to the non-eternal (i.e. temporal) (*sūtras* 32-34); (14) to the eternal (*sūtras* 35-36); (15) to the effect (*sūtras* 37-38). All these categories, in their totality, contain reflections of reasoning on the structure of reason. They constitute, as it were, elements of the deep structure, in relation to which any *antinomian* structure of categories (including that of Kant) must appear as a surface logic. To be included *reflectively* in the structure of reason means to be employed effectively in the composition of

disputes. This is underlined in the last, totaling category of *jāti*: (16) relative to the 'six steps of futile controversy'. The main function of this concluding, six-winged, *jāti* is to demonstrate a relation to the faculty of reasoning which the subject must have in order to exercise logical thinking itself. And this exactly is the main function of *jati* in the system of *Nyāya* as a whole." (pp.163-165)

Explanation of the sixteenth groupings of *jāti* as "relative to the 'six steps of futile controversy'" (*Ibid.*, p.163) was undertaken by Zilberman within his analysis of the 'six-winged disputation'.

(7) Here is one more extraction from Zilberman's 'Dialectics in Kant and in *The Nyāya-Sūtrà*: "As we can see, balancing, that is, dialectical mediation, is applied exclusively to the definition of reasoning, and on this basis it includes the means of both formal, subjective logic and content-bearing, objective logic, while Kant would analytically separate them as antinomies of *different* categories (logical, aesthetical, causal, etc.). But here they are united because they belong to the same group of the conceptual means of reason which are also related to the formal definitions of reasoning. Thus in *jāti* we discover, as it were, a missing link between Kant and Hegel. Here all the categorical definitions of reasoning are balanced by the same means of dialectics which are employed as instruments of the reason's self-definition, i.e. as different from reasoning. Thereby the possibility of the deduction of the categories is discovered, although not carried through.

And yet, Vātsyāyana is making an essential step forward in that direction. In his *Commentary* he proposed a *secondary* grouping of 24 classes of *jāti* along those lines which prepare their deduction, that is, by relating them to the *structure of logical inference*. Deductibility of the categories means that the list of conceptual means included in their content must be complete. What is the evidence that we can have exactly 24 classes of *jāti*, no less and no more? This evidence cannot be formal again, because that would mean begging the question. The required completeness can be shown only be demonstrating the interconnectedness of all the *jātis* with the entire inventory if the systemic importance found in *The Nyāya-Sūtra*." (*Ibid.*, p.162)

(8) As Zilberman pointed it out: "The 'six-winged disputation' concludes the section on *jāti*." (*Ibid.*, p.169)

(9) Zilberman exposed these ideas as follows in his 'Dialectics in Kant and in *The Nyaya-Sutra'*: "The first, third and fifth wings belong to the disputant while the second, fourth and sixth belong to the opponent. The sixth wing is the repetition of the forth while the fifth wing is the repetition of the third. The sixth wing is also a repetition of the meaning of the fifth wing. The third and fourth wings involve the defect of 'admission of an opinion", i.e. are liable to a critique of the faculty of judgment. All the wings except the first three are inessential. The disputation would have come to a fair close at the third wing if the disputant had pointed out that the word 'effect' had a special meaning, viz. a thing which did not previously exist but was produced. The disputant and the opponent, instead of stopping at the proper limit, have carried on their disputation through six wings beyond which no further wing is possible. After the six-winged disputation (*śatpakśī kaṭhā*) has been carried on, it becomes patent that neither the disputant nor the opponent is a fit person to be argued with!" (*Ibid.*, p.171)

(10) We can find a condensed summary on this point in "Dialectics in Kant and in *The Nyāya-Sū tra":*

"Thus *jāti* is proven to be neither sophistry nor an endless discussion in which the parties involved appear as subjective assessors of truth. On the contrary, owing to *jāti* it became clear that both are wrong. And the *positive* result of dialectics is singled out in the form of the *canon (nyāya)*, i.e. rules of logic which are operative regardless of what is the subject-matter under discussion.

Now we shall inspect this process as it *actually* happened and was reflected in *The Nyāya-Sūtra*. Thereby the real mechanism of formation of logic will be discovered.

The conveyance of *nyāya* in the *Sūtra* is accomplished in 16 categorical topics (*padārtha*) which can be conventionally divided into two groups. The first group of nine categories obtains the instrumental function of immediate means (*karaṇa*) of the subjective or *formal* logic, because all of them are essential in the formation of logical truth. The remaining seven categories in the second group constitute the objective, or transcendental part of *nyāya*, with the mediative function of dialectical knowledge as essential to the production of knowledge itself, rather than of its mere 'truth certificate' from the matter of dispute.

In the case of unbalanced correspondence between the *sources of knowledge* (*pramāṇas* = 'prerequisitory means') and the *knowable things* (*prameya* = the 'foremeasurables'), *doubt* arises as an awareness of concubence (*saṃśaya*) rather than correspondence between the means of cognition and the knowable objects. Thereby an inquiry is required, with the purpose of *bringing into connection* (*prayojana* = attaching) the prerequisite means of knowing and the knowable objects (or known things). The connective construction is secured by use of appropriate *visual aids*, or illustrations (*dṛṣṭānta*) which prove that connection. The content of each illustration is selected with an account of its relevance for some particular tenet or *theory* (*siddhānta*) which is qualified as such if it establishes the required correspondence. That kind of illustration is included in the *five-membered structure* (*avayava*) [see note 3 above) of logical inference and accredited there as a necessary element of logically proven knowledge. What follows as a necessary completion of this logical organization of knowledge, is reversion, or *turning down* (*tarka* = 'torgue') of any other judgment which ends in the contrary to what is established by the logical proof. By reducing the contrary argument *ad absurdum* and thereby finally establishing the right one as true, the contradiction between the alternative judgments is *suspended* (*nirnaya*) and taken into the right one, as marked by the supportive instance. Here the formal part of *nyāya* is over: the structural deployment of logic is concluded. After that *nyāya* is unfolded not structurally but in the genetics of its logical content. And the whole procedure is finally realized as contained in the matter of *discussion (vāda)* [detailed explication of *vāda* see in the note 3]." (*Ibid.*, pp.171-172)

(11) Doubt has a special meaning in the *Nyāya* logic which "is built in a series of attempts to dispel, that is, the modal mood of the Subject of knowledge. In this process, its categories can change their functions and relative positions, so that the Subject is constantly forced to place himself into the locus of the Other and then return to his situation of 'knowledge' from the displaced situation of 'doubt'. To accomplish this transition, that is to secure genuine individuation of the Self in the newly filled content of knowledge, he resorts to the canon of four Commensurements." ('The Canonical Self in the World of Knowledge', in *The Birth of Meaning in Hindu Thought*, p.209)

(12) Zilberman returns to an explication of the same topic in his 'Canonical Self in the World of Knowledge' when he analyzes Ingalls' interpretation:

"*Paryāpti* can certainly be translated as 'embrace', 'completion', 'wholeness' (*parayavasanam, sakalyam*). So Ingalls assumed that *paryāpti* is a relation by which number inheres in the wholes rather than in parts of whole. And he could not understand why this function of *paryāpti* did not receive such a tremendous development in *Navya-nyāya* as it did in Western logistic. He acknowledged that the *Nayāyaikas* use the relation of *paryāpti* to eliminate the contradiction of their system of categories. But, for some reason, he judges this function to be less important than the possible use of *paryāpti* in the function of number as the class of classes.

In the meantime, the proper use of *paryāpti* turns out to be so important for the system of *Nyāya* that had the *Nayāyaikas* unilaterally developed this relation in the direction suggested by Ingalls, this development would not only have finished the work of *Nyāya* as a system of logic but, rather, dissembled it altogether. Despite this, *paryāpti* crowns the *Nyāya* system.

The issue is that the assertion that numbers inhere in the wholes rather than in parts of the whole, is wrong. Both pots in the pair are not parts of duality in any representable way. If they constitute some holistic system of two pots, then, being parts of the whole, they are not substances any more. In this case, a mediating relation of contact would be used instead of *paryāpti*.

Let us take another example: "Pot and the sky: they are two". The sky is unique, so it seems that it cannot possess an inherent property of duality. But here it is presented only as an individuality which can be conceived along with other individualities, in combinations - just by the force of its inherent property to retain this individuality to the status of the part (as, for example, in the still-life: 'A pot against the background of the sky': here the 'sky' (or, rather, its image) which is invisible and thus imageless - can refer to the individuality of a thing. In this case, it must somehow be related to the thing itself rather than to its function as a part of the whole [. . .]

It is individuating function of number that Western logicist falls to grasp. The fact is that the individuality of a pot and the individuality of the sky can be secured in this process of formal demonstration that a pot is a pot, and the sky is the sky. This demonstration cannot be reached

by a simple comparison of properties in reasoning analogous to the similarity or dissimilarity of things.

Well, but *any* thing can be defined by its properties only as 'such' or 'not such'. And only a personality, an individual, can be attested as 'the same' or 'not the same'. Consequently, to attest the desired result we have to recognize pot and the sky not as things but as *individuals*, regardless of how strange and unusual this advice might sound in relation to a system of *formal* logic. And the relation of *paryāpti* is good just for this purpose, as it can help dissolve the illusory image of the isolated, naked and solitary, Self of *Nyāya*.

What is this 'Self'? If it is just a naked identity 'I'='I', then he is not even able to recognize and confirm this very identity of his own, for everyone would call himself by the same pronoun. A simple dual opposition 'I'= 'Thou' is also not sufficient for this purpose. For 'Thou' is not just a 'non-I', for 'Thou' is as it were appropriated by 'I' through this negation. As for the acknowledgment of 'Thou' as a 'non-non-I', it can be equally interpreted both as 'I' again, and as 'He'. In other words, only individuation of this 'He' guarantees the non-alienable right of 'Thou' to have its separate being, as well as the combination of the reality of the Self as a non-empty and 'personal' thing. Only in this trinitary sense can be individuality of the Self be attained. As for its reality, it is manifested as a particular moment which makes the generality of the Self genuine.

It is well-known that such a trinitarian interpretation of number is accepted in the modern theory of sets. Thus, according to Cantor, the individuality of every number is characterized by two parameters: its power (cardinality) and order. The difference can be seen when the complex - trinitary - unit is counter-posed with the fourth, which makes the idea of ordering possible. Besides, the same idea can be presented at the trinitary level, when the principle of positionality and the notion of zero are introduced: the differentia (l?) of position measured from some absolute position gives the idea of order. In this case, the trinitary numerical property reaches an individuation function and becomes a personifying index of a thing.

In *NavyāNyāya*, the relation of *paryāpti* plays the same role. Owing to this relation, all previous 'knowledges' - before the 'knowledge' with *paryāpti* is introduced - can actually be considered as separate reified Selves; for the content of every 'knowledge' (*viṣaya*) makes the object the possessor of its content (*viṣayin*). As for *paryāpti*, it makes it a person whose power is rated by the number of relations previously built by logical operations, while the order is canonized in a sequence that introduces the elements of these relations into the system of categories.

The method of individuation of Self-knowledge in *NavyāNyāya* consists of two complimentary technics: guarding against insufficiency (*nyūnavāraka*) and guarding against irrelevancy (*itaravāraka*) of some inclusions in the logical formulas. Conjointly, they make the thing 'personally the same' rather than just 'similar' or 'such as'.

Let us inspect more attentively how the 'duality' - which cannot be referred to the parts of the whole but is attachable to the individuals included in a set - is correlated through *paryāpti* with the numerical identity and individuality of a 'personified thing'.

When two objects are not identical, one of them becomes known as the adjunct and another as a subjunct of the relation. Thus, for example, 'potness' is the adjunct; 'pot' is the subjunct. Their relation is that of inherence (*samavāya*).

The knowledge: 'There is no fire in the stove' is found through the relation of *paryāpti* in two things: (1) in 'fireness'; (2) in 'stoveness', i.e. in the locus of contact of fire with the stove. the first is a condition of the absence of fire just in the stove.

That is why the relation of *paryāpti* is introduced in two different techniques: in the case of guarding against insufficiency by the system of delimiters (*avacchedaka*) inserted into both elements of the relation is the 'object of experience' ('the absence of fire in the stove'), and into the elements of the *paryāpti* relation, it is demonstrated that, in the first case we have the 'idea of the object of experience' represented by a set with power of no more and no less than two units. In the second technique of guarding against irrelevancy, it is demonstrated that the given pair are 'fire' and 'stove' but not, say, 'mountain' and 'fire' - which constitute a different pair.

It is essential to point out here that this bifurcation of experience occurs owing to the original assumption of the *Nyāya* axiomatics, where the idea of experience is assembled from the evaluative

judgments. The *paryāpti* relation is manifested as a trinitary quality, i.e. as an artificially created quasi-object of experience. In this case, it is not a substance, but an essential quality (*syadharma*) of knowledge. As for that quality, according to the system of *The Nyāya-Vaiṣeśikā* categories it does not require immediate demonstration, but only substance has to be demonstrated. The relation of *paryā pti* is an indirect relation (*paramparasambandha*). It is 'evidently' does not have to be confirmed, for the idea of demonstration by experience is introduced *a posteriori*. If we make a return from this pseudo-subject of the *Nyāya* system through all its previous levels, we shall come to the initial conditions without meeting a real object or an immanent subject anywhere. (*Ibid.*, pp.213-216)

HISTORY OF INDIAN LOGIC

Except for European civilization Indian civilization is the only one where in the course of development of philosophical thought an elaborated and complete system of formal logic was created. Although resembling the European one in its many conclusions and in general shape, this logic is significantly different. Some problems, apparently unanimously and quite early on, i.e., in times of Aristotle and the Stoics, solved by European logic, were investigated by Indian logic for a painfully long period of time. An explanation for this has to be looked for, it seems, in the peculiarities inherent to a developing Indian spiritual culture, and in a specific interpretation of the logical problems developed there. Quite often, Indian logic followed a path unknown to European logic and not discussed there until at least the end of 19th century. Out of the many remarkable peculiarities of Indian formal logic (especially in the shape it took in the system of *Navya-Nyāya*) a tight connection between logical formalism and linguistic material has to be mentioned. Indian thinkers of a latter period form a logical expression as a formula, which is thought to be general; such formulas, however, are not set as symbols, but as linguistic constructions, as the so-called 'paradigms' of 'linguistic clichés'. A common characteristic defining Indian logic throughout its history is its revealing intentionality. European logic, on the other hand, is a predominantly extensional one. Remarkably different characteristics of Indian logic also include the presence of non-quantum formal expressions, a complicated theory of relations, and a unique theory of multi-level abstraction. At the same time, logic of expressions is almost completely absent from Indian tradition; logic of classes is developed in a rudimentary form. Surprisingly, during its very early stages, Indian logic developed a theory of formal implication and some other theories which appeared in Europe only much later, together with development of mathematical logic. In any case, when strictness of formulations and a demonstrability [of its major arguments] are examined, Indian logic does not prove inferior to European logic, at least until the end of the 19th century. According to the noted specialist in the history of Indian logic, Bochenski, Indian logic can be interesting to Western logicians because it was developed as a formal logic without any influence from European logic, and this process was initiated on different

foundations. (1) Owing to this, we acquire a unique opportunity to observe what lies behind the horizon of European formal logic. Only Indian logic gives a historian such an important possibility, namely that of comparison. Moreover, because in resolving certain problems Indians achieved a maximum of logical strictness and abstraction, Western logicians could borrow a lot from them if they were to undertake a more detailed study of their legacy and to engage in more elaborated interpretation. (2)

Our task, thus, is to define a subject and its specifics by means of an analysis of the history of its development. An analysis of a history of logic will make sense if we admit the presence of a certain possibility for comparing both cases. That is, Indian logic can be translated into a European language and can be studied only when logical laws are taken as a reflection of certain invariants of a thinking activity. It means that a similarity in both cases is based on a presupposition of certain non-historical conditions in the existence of human thinking; we have to assume in advance that any description of a historical process will only be a characteristic of those situations, or circumstances, in which a few invariants, inherent to human thinking, 'play' or reveal themselves. (3) A prerequisite for such a presupposition can be the idea that thinking is a certain method of interaction between thinking subjects included into a social group; i.e., some activity organized in a certain way to determine their relationship to each other and to establish certain rules of cooperation. All this in sum has to represent that invariant foundation which we characterize as laws of logic. If done, the [legitimacy of a] perceived diversity of reactions, in particular of approaches to solving certain logical problems, has to be specified as a product of interaction between a certain cultural matrix and 'new' portions of utilized material, i.e., as a content of the activity of social groups in their daily-life existence. This assumption permits us to put a hypothesis forward about certain cultural invariants which, when formed and then repeated, become more and more stable (as a result of improving the means of their realization).

Let us formulate our task as follows: to reconstruct the history of Indian logic in such a way that the above-mentioned peculiarity is as visible and clear as possible. Certainly, we might be accused of some arbitrariness and roughness [. . .] If we intend to reconstruct a theory which deals with the universality of thought or of any other reality [with a universality which repeats [itself] only in essence, in a shape of similar problems, on different stages of history] what constitutes the objective of historical reconstruction? On the other hand, if we consider the same phenomenon as a unique revelation of a certain culture, we acquire the possibility to experience a specific spirit of this given culture, i.e., by a diversion from its own problematic we become able to analyze such a phenomenon from a cultural-anthropological standpoint. While studying certain material from the point of view of a formation of specific logical problems, we are not obliged to follow their historical retrospective; they can be arranged differently. However, by analyzing the history of logic as a part of a history of thought, i.e., by placing it into a wider and more vague context, we abandon the field of the logical

problematic as such and try to replace it with a description of a 'surrounding landscape' (for instance, that of a cultural, or social character).

A logical problem as such appears when known paradigmatic methods collide with new material and thus their non-correspondence is revealed. Likewise, a specific, urgent intellectual necessity to eliminate this discord also arises. If human thought is really guided by invariants, it has to react in basically the same manner each time that intellectual problems of similar range and content appear. The only peculiarity will then be that since these problems are being solved within a material of the same culture, an optimum solution of the problems of such a type will gradually increase, as those invariant paradigms are continuously introduced into different situations: a number of standard programs will be accumulated, and an activity for their unification and generalization will be accelerated. Indeed, in Indian culture we notice a quite revealing traditionalism and a refusal to consider this or that problem historically. This can be noticed, for instance, in the numerous attempts to reduce all new problematics and methods to a previously existing knowledge; i.e., to old forms. For instance, this has been posed as follows with respect to orthodox systems in philosophy, or *darśanas*: "There is nothing in *darśanas* which was previously not [described] in the *Upaniṣads*; the *Upaniṣads*, however, do not contain anything which was not present in the *Veda*". That is, even a purely logical tradition acquires a form of commentaries, commentaries on commentaries, commentaries of the third level, and others, which together relate to a certain root text; authors of such commentaries claim in principle that the content of their works can be entirely inferred from this initial text. (4)

This is why it seems that our material can be analyzed by means of a structural method. If we reveal within such analysis those major motives or methods which were practiced by Indian logic and which remained, in its essence, the same [when applied to different fields of knowledge] or developed according to a certain generalized, unified scheme, and if we then try to reconstruct intellectual situations fixed in a sequence of logical texts and to present these [intellectual situations] as a result of a combination of these invariant elements, as well as to show the types of relations between them, we should be able to interpret deviations from this identification and reconstruction as a product of a historical development of thought.

Let us illustrate this by the following. As early as in the *Ṛg Veda* an idea was introduced, although in a vague mythological form, of the non-describability of an individual object through [by] certain general properties. It is precisely this non-describability that represents all the specifics and uniqueness of an individual object. Different attributes of universal and individual objects are initially presented in the *Ṛg Veda* as a certain mix, but gradually they gravitate to two extremes: the Absolute which can be characterized by a combination of all thinkable properties and an absolutely non-describable Individual (in this particular case, an individual subject). What becomes a problem is the task of establishing a relation between them, i.e., a task of self-cognition as a certain logical

process aimed at ascertaining the Absolute in order to uncover a system of relations of an individual with the properties of this Absolute. [While judged] in absolute norms, an individual can be perceived as a meaningful absence of attributes. That is why a general formula of the individual was viewed as a double negation of any describable indications as early on as in the *Upaniṣads*: *Ātman* is a 'no [of] no'. This idea was then quite intensively explored: by philosophy, within attempts to create a psychological foundation of a state of absolute freedom (*nirvāṇa*), or by the ontology of a subject (*ātmabadha*); by linguistics -in a notion of 'zero-form'; by mathematics -as a notion of 'zero'; and, finally, by formal logic, as a method to generalize properties through their double negation. This process of translation/transference of a paradigm can hardly (if not at all) be regarded as a specifically Indian phenomenon and thus analyzed in some kind of a historical succession. However, if we analyze a development of this idea in a concrete situation, the problem of a historical description will make sense again.

It is precisely in this connection that we can raise several interesting questions regarding the historical parallels between Indian and Western logic. For instance, how were they both affected by a sequence of mutual influences between grammar, logic, and mathematics? If, in India, grammar was completely organized by the 4th – 5th centuries B.C. (and since then did not develop, except through further details), and, moreover, acquired forms, which appeared in Western grammar only at the end of the 19th and the beginning of the 20th centuries (as a structural linguistic), then we can ask, how it would influence the entire development of logic and why (if not to trust those not very convincing explanations which link a stabilization of grammar forms to a general stabilization of Indian culture)? In turn, we can then ask why this development did not have any continuation. While ancient Greece witnessed a sequence of influence during which mathematics, logic, and grammar were present (in this order, and according to time of their formation), as the Greek counterparts, the Indians went through a different succession – that being grammar, logic, and mathematics. This can explain at least partially, why Indian mathematics acquired the most abstract character in the entire ancient world and achieved an extraordinary theoretical level. It was precisely Indian mathematics where an abstract notion of number, different both from an idea of a calculable number of objects and from a measured spatial extension, was formulated. Greek mathematics was a measuring and geometrical one, while in India elements of algebra were developed; this allowed for complicated calculations for the creation of an abstract theory of number. What is quite obvious, as we will show later, is that this culture was influenced by its grammatical paradigms; moreover, it was developed in many respects because of its early interest in a linguistic problematic. At the same time, however, it is difficult to explain why Indian logicians, who formulated a logical idea of number, an idea, which corresponds to a definition of a logical idea of number by Frege, did not initiate something comparable to mathematical logic as such (although a certain progress in this direction had been

made). Problems of this sort can be solved, it seems, only within a concrete historical analysis.

To resume: we intend to show, first of all, the invariants of thinking inherent to any culture and then to demonstrate how these invariants were incarnated in the development of Indian logic and to return again into the sphere of a culture [. . .]

If we examine the development of a logical problematic within the general scheme of culture, we see that it is Indian logic, which provides us with a number of significant advantages. Certain periods of the development of Indian logic were much more closely connected to an immediate social environment (because of a higher degree of professionalism) then was the case with Greek logic. In addition, a different temporal pattern for solving major logical problems (like those of general connection, namely, a deceleration and stretching in time) gives us a chance to grasp the subtle nuances and detours taken by thought in its search.

A cultural substratum of Indian logic appears to be more profound than that of Greek logic. This can be seen, first, in the co-existence of more archaic, primitive forms, from which logical teachings were later developed, with these very teachings, and, second, in the large-scale attempt to identify the former and the latter. This can also be seen in certain peculiarities of terminological development, as well as in the general tendency to treat logical problems as subordinate to specific meta-logical tasks. This reflects such a universal characteristic of Indian thinking as its traditionalism. The closer the connection is of primitive levels of culture with its advanced abstract forms, the more tenacity there is [in respect] to attempts to establish organic integration [between them] on a common foundation. In all probability, this correlation makes Indian material quite suitable for analyzing the peculiarities of its self-development. More specifically, precisely here as nowhere else, we can, by tracing the evolution of certain directions of Indian philosophy and logic, deduce these directions from certain initial strata of a primitive culture and show how strict logical forms appear within this development, in addition to showing [how they] acquire a more and more precise definition.

From a position of general culturology, India does not differ from other cultural areas; however, if we consider logic as a part of culture, then the Indian situation seems to be unique. We can trace how gradually, by changing each other, styles of thinking were developed; how ‘primitive thinking’ was eventually transformed into a ‘philosophy of common sense’; how the subsequent attempts of its psychological and subjective-personal interpretation were undertaken; and, finally how these attempts led to the generation of certain conceptual models of epistemological and logical character, with a terminology apparently derived from the previously accepted psychological ideas (which, in fact, was a result of a certain decay of these ideas). [What is also important is that], within such an analysis, we obtain an opportunity to discover the difference between philosophical and logical thinking, on the one hand, and mythological thinking, on the other (the former rising up from the latter). Using the development of philosophy of *Saṃkhyā,*

as an example, one can clearly trace how purely 'mythological' thinking in a form of a sex symbolic gradually transformed itself into specific cognitive concepts and, finally, how an attempt to explain the philosophical problems psychologically had been undertaken and followed by creating the so-called 'psychological logic'. Quite remarkable, however, is that all previous stages were to be preserved within this transformation, owing to a multiplication of the senses of interpretation. This certainly requires an enormous sophistication of textual analysis, as well as an elaborated terminology. Such amalgamation seems to be a common characteristic of Indian philosophical culture: it proves itself to be an invariant of thinking mechanisms [. . .]

I am convinced that Indian philosophy reaches a superior level of philosophizing because of the well-defined specialization of this type of activity in a social sense. Within Western culture, because of a non-differentiation of functions, a philosopher has to perform many other roles: to be an ideologue, pedagogue, social organizer, etc. [. . .] Within the much more organized Indian society we can imagine the existence of pure philosophers. Such people were really there. Since I have already accumulated substantial knowledge about things as interpreted and expressed by Indian philosophy, I can assume that in a certain sense I have overcome an irresistible barrier of culture-centrism and can master Indian philosophy. However, this mastering remains on a level of a pure understanding, unless I try to interact with someone in the very same sphere of Western culture. To grasp a sense is only a part of the entire process of interaction. [This interaction is reflected in that special division of intellectual labors when] an organization of representation in order to understand [whatever becomes an object of explication] is performed by semantics, while a general organization of interaction is ensured by logic. That is why, expounding the content of Indian logic, I try to simultaneously solve a task of establishing a contact which goes beyond understanding, into a sphere of interaction. An interaction, therefore, is a realization of understanding, which I would like to reach.

It is quite possible to expound the structure of Indian formal logic by showing its system of categories, ontological principles, axiomatic and rules of deduction. By doing that, we can certainly obtain an idea about a system of logic which is quite original, clearly completed, and closed to the European system of logic. But we would still have left the following question unsolved: does this formal system have a sense? I would like to accentuate that Indian logic operates not with judgments, but with 'things'; i.e., is, in its essence, virtually indistinguishable from such a constructive and objective activity as, say, engineering. A constructive approach of this logic represents a certain activity undertaken with respect to things, not ideas. This is why the most acute problem is how to interpret a symbolic apparatus of this logic, as well as the apparatus that we have to introduce for this interpretation. Perhaps we cannot solve this problem without a reasoning of a broader culturological character aimed at explicating the active nature of Indian thinking, which is not theoretical in European sense of this world.

Indian philosophy, it seems, can be regarded as a pure philosophy since its representatives were predominantly occupied with a description of what they were doing while thinking. A description by Indian philosophers of their own mental activity had such a high level of terminological elaboration that we, who do not have this complicated apparatus, experience difficulties describing them by means of our poor language [. . .]

Indian philosophy, let us stress this again, from the very beginning was a speculative one, i.e., was preoccupied with a foundation of human reflection [thinking]. A movement of thought for Indians, because of the reflective character of their thought, should not be followed by its disciplinary or subjective division, as happened in European tradition where a categorical apparatus indispensable for a disciplinary division was simply not created. It resulted from a lack of a theoretically-active reflection on foundations of such division [. . .]

Thinking fixed by speech can be divided not only according to categories applied there, but also due to a character of their social use. Within a structural description of logical forms through their correspondence to a certain function of ascription (a referent function of language), a phenomenon of non-correspondence of a logical norm with its situational utilization has been created; this led to an analysis of patterns instead of an analysis of a linguistic form, and thus, to a situational utilization of symbolic systems [. . .] The following analysis focuses on finding a correspondence between certain sequences of specialized operations, i.e., to throw light on the rules of using speech. Together with the development of knowledge, a specific logical function appears from this sequence. This is why the formation of logic can be understood only when the formation of speech activity as such is taken into consideration.

This process can be depicted as a certain overlapping of reflective and instrumental activities. An initial conceptual element there was apparently not a structure of a separate linguistic code (i.e., natural language, with its set of semantic norms) but a summarized multitude of structural-active habits implemented in a communicative reality of a social group (when this later uses a code and verifies its instrumental fitness). In a generalized form all this represents logical forms or rules of operating. A linguistic bracket of this activity is reflected on a level of sense; this leads to attempts to depict the world by linguistic categories and to interpret these categories as ontological.

As an example we can reproduce a process of meditation in Aristotle's texts. Having reflecting upon an activity regardless of a context in which it has been undertaken, he attempted to express it by means of specific linguistic forms. This seems to be the reason why certain specifically linguistic structures heavily influenced (even shaped) a form of his thinking. This in turn led to that mix of [structures of] reflective activity with its grammatical-ontological forms, which can be traced in his *Categories*. The very structure of this work, it seems, quite clearly reflects his linguistic predisposition. When specialized types of activity (mathematics, etc.) are analyzed, i.e., when a social and cultural differentiation of knowledge is taken into account, a co-variation (meeting) of linguistic codes

with other forms of [mental] activity becomes evident. This uncovers a need in special means to co-ordinate a dominant linguistic code with non-linguistic ones. Quite remarkable is that this need is satisfied by means of group cooperation; this is why the results appear to be linked to symbolic forms, which are always necessary for communication within a group. This new structure of activity is based on an opposition of a form (as certain organizing procedures) and a content of communication (as its symbolic filling). An ideal for logic is to achieve a state, such that all possible linguistic and non-linguistic codes are subordinated to certain unified rules of ordering and are expressed in the same symbols [. . .]

[If someone claims that] a clarification of the motives of the appearance of logical problems contributes nothing to the understanding of these problems, I would not argue. I would try, however, to solve another problem, namely, to show how a division of knowledge [within Indian classical culture], differs from that occurring in European history. That is, I want to understand why and how a philosophical reflection, as well as other types of cognition (psychological explanation, etc.) were created. I would like, for instance, to trace a process of the separation of psychology from logic (5) [. . .] But to become aware of such a thematic division an analysis of motivation is necessary. Socrates discussed a problem of moral virtue without taking a close look at the very form of thinking; it led to his introduction of the method of 'division and comparison'. It would be sufficient for me to show that a symbolic content of this problem and its formal solution, as proposed by Socrates, are connected. Certainly, logical categories fit any content, but [why not presuppose that] their sense can be changed depending on the material to which they are being applied [. . .]

Socrates, while discussing virtue, perceived it objectively, i.e., a subject-predicate situation was posited there from the very beginning. Such a mode of reasoning, when a person acts for himself; i.e., can create situations [by] a mere placing of changing objects in front of him which results in constructing different 'representations', and therefore, would always influence his thinking, as well as his reasoning, i.e., logic. (6) We see an entirely different situation in India. A subject-predicate idea here is neither an initial, nor a fundamental point of reasoning, as the last resort - its final result. That is, a logical procedure has to reflect and fix a process of a sense-distinction [differentiation] of a gradual separation of an objectified predicate by a subjectivizing actor [separation of this predicate] from himself. It is precisely here where this entire difference, so interesting and drastic, is located. And it is precisely there where the development of two such different logical traditions initiates. It is hard to imagine the existence of someone in ancient India, who, like Socrates, would just sit and meditate on what is virtue as an Object separated from him, a meditating person. The impossibility of a subject-predicate division within [according to] the very structure of Indian thinking can be explained by asserting that this thinking, even [taken] on a level of philosophical action, still keeps its group character; [namely that] of a type of a joined production of the results of thinking of/as ideas. [When

considering such a group] we have, minimally, a binary group, a teacher and a pupil, as two who create knowledge; [it is worth noting that] relations between them do not have a normative character. An 'aggregationness' of Indian thinking explains the amazing fact that the very idea of a 'reflecting person' can appear only when an interaction of several people is considered. Because of the peculiar reason of its appearing, such an idea remains inseparable from a symbolic component [as present] even on the highest, the most abstract level of thinking. I think that precisely here the major difficulty for Europeans in their attempt to understand the specifics of Indian material is [hidden]. A reflecting subject in Indian tradition cannot appear as a notion or an idea if the real interaction is absent. Any philosophical speculation [reflection] is a product of cooperation, and nowhere else can it be shown more clearly (in both structural and procedural senses) than in Indian material. In any case, even in the earliest stages of development [of Indian philosophy] one of the major questions, raised in numerous disputes, was to discuss how a creation of an 'I-image' (i.e., of a reflecting-meditating subject) had to be approached.

But [in contradistinction to ancient Greeks] Indians were interested in a fixation not merely of a reflective sort, but in a procedural definition, in a description (as illustrated by different metaphors and images) of the certain stages of the attempt to create or to form a reflecting subject; interestingly enough, symbolic, expressive, and cognitive aspects were pointed out with respect to each of these stages. A dismembering of this process permits one to penetrate its inner mechanisms. We do not have this in Greece, since everything there was of the significantly larger scale. Each level of subjectivation [within the Indian approach] is taken as possessing a certain corresponding scheme of meditation based on different sources of trustworthy knowledge. A confrontation of the differences [between levels of subjectivation] becomes an object of a special logical discussion. The creation of a vast hierarchy of intermediate levels [as a characteristic] of a reflecting subject can be brought into line with the social structuring and semiotic organization of Indian society and its culture. Indian society is a hierarchical one, while Greek society is a pluralistic one. That is why reflective images of the world have to be much clearer in the first case, than in the second. It also has to be added that a hierarchy is preserved not only as a social stratification, but also as a process of socialization of individual. All this was reflected in quite a detailed procedural representation of both structure of thought and process of thinking. This was also captured in an ancient reasoning about the nature and essence of *Ātman*, both of which were reflected by purely symbolic means. Although a formal structure of this reasoning was certainly not clarified by its 'co-authors', the very principle of modalization was already grasped, and a ritual of sacrifice was underlined as the first model of group participation in order to create a symbolic product, which embraces both a thought and a thinking subject. Evidence of this realization [by Indian tradition of this entire situation] can certainly be found in the teaching about 'inner sacrifice' developed in the *Upaniṣads*.

EDITORIAL NOTES

(1) I.M.Bochenski. *Formale Logic*. München, 1955, S.517.

(2) In his manuscript 'On Sociological Prerequisites of the Emergence of Indian Logic' Zilberman puts similar thoughts into the following form:

"Indian civilization is the only one except a European one, where a completed system of formal logic, significantly different from a classical European logic, was developed. The most remarkable feature of Indian formal logic (as it was reflected by the most advanced system of Indian logic, by *Navya-Nyāya*) is clearly a close connection of a logical formalism to a linguistic material. Logical expressions were presented as certain formulas of 'knowledge' fixed not by symbols, but by linguistic clichés. A common characteristic of Indian knowledge on all stages of its existence was a consistent intentionalism, whereas European logic was still a predominantly extentional one. Important properties [of Indian logic] appeared to be also a utilization of non-quantum formalized expressions, presence of a complicated theory of relations, and a unique theory of a multi-level abstraction. Quite early a teaching on formal implication and some other theories were developed; all of them appeared in Europe only together with the development of mathematical logic. But at the same time Indian tradition did not really develop a logic of expressions; a logic of classes was also left in a bud. However, when a strictness of formulations and proofs are being considered, Indian logic was not behind European logic of the end of the 19th century. According to Bochenski, Indian logic can be of a significant interest for Western logicians because it was developed on totally independently and on entirely different foundations (Op. cit., p.517). It gives an important advantage: namely, a unique chance to glance over a horizon of Western logical tradition. Besides, since in solving of a number of problems Indians reached an extraordinary logical clarity and abstraction, under condition of a more detailed study of their legacy, and of a careful interpretation, a lot can be borrowed by a contemporary science." (Zilberman, D. "On Sociological Prerequisites of the Emergence of Indian Logic." Zilberman Archive, 1.7.5., pp.1-2)

(3) Similar ideas, although with a different conclusion, were developed by Zilberman in his recently cited 'Sociological Prerequisites'. This conclusion concerns an idea of a 'style of thinking', which was not elaborated by Zilberman anywhere except in his Ph.D. thesis and some letters. Since this conclusion seems to be rather important for understanding the basic conception of the whole text, we will quote the whole passage:

"A possibility to translate Indian logic into a language of European science is quite real, only if [to agree that] logical laws reflect invariants of human activity. This means that a similarity in both cases has to be based on the existence of some non-historical factors, whereas a description of a concrete process will be just an illustration of those situations in which invariants reveal themselves. 'Laws of logic' are, generally speaking, expressed in a clear form of rules, established by logicians. These rules have to give the universally true results, which means [an assumption] that only true conclusions follow true premises. On the other hand, laws of logic can be interpreted as a product of culture. Within this analysis a notion of cultural tradition is associated with such a characteristic as a 'style of thinking', which can be related to the thinking of any individual if it reflects the specific mental habits of his culture. A style of thinking within a group reveals a dominant tradition of this group. Each individual, following a certain style of thinking, develops a contingent system of thought based on his self-consciousness: philosophical, theological, etc. His efforts in these directions are influenced first of all by language, which serves as the foundation of the cultural identity of the group. Forms of linguistic expression [utilized] by self-consciousness perform as norms of a psychological ordering of behavior according to a fixed scheme, [scheme,] which [when used] guarantees results of thinking operations. Thus, peculiar forms of language reveal a style of thinking (although not necessarily rule it). This is why it is not indifferent in what material formulations of rules of thinking are realized and out of what [substance] knowledge is being built. As it seems, Indian logic has to reveal the most characteristic features of Indian style of thinking in a quite generalized form. This is because logic always presents itself as a systematized entity, and under any linguistic and sensual transformation still performs as a connecting canon (*nyāya* = 'canon').

Obviously, logic characterizes, first of all, the thinking of intellectuals. But perhaps nowhere else except in India did a general culture depended so heavily upon the norms of thinking and a language of a caste of professional intellectuals - Brahmans." (*Ibid.*, pp.2-3)

(4) This entire reasoning, namely, after the sentence "Let us formulate our task as the following", was expressed by Zilberman differently in his 'Sociological Prerequisites'. We can also find there yet another definition of logic, which seems to be absent from other texts of Zilberman, namely that of "logic as a style [stylistic] characteristic of culture". This definition is clearly connected to his explication of a 'style of thinking', quoted above. The whole reasoning on this subject is put in 'Sociological Prerequisites' in a more general context of his analysis of the history of Indian logic as such; all these reasons persuade us to quote this passage once again, in a version from 'Sociological Prerequisites': "The history of Indian logic ought to be reconstructed in such a shape, that the invariants proposed above would be visible as clearly as possible. But if to interpret teaching, which deals with a universal [content], as only a repeating of itself in similar situations within different stages of history, what is the point of historical reconstruction? By analyzing logic as a style [stylistic] characteristic of culture, we abstract ourselves from a history of the formation of its own problematic. While studying how certain logical problems develop we do not have to follow the sequence of their historical formulation.

A logical problem as such appears each time when, in the course of utilizing the cultural paradigms of thinking, their non-correspondence to explicated material has been revealed; and when a peculiar intellectual situation, perceived as a transitional one, has been created: namely that of an acute necessity to eliminate this just mentioned non-correspondence. Human thought, if it is really ruled by invariants, has to react in a quite similar fashion each time intellectual tasks of [with] a uniform content are formulated. A peculiarity of a historical sort consists in that, since these tasks are being solved within a unified culture, a continuous translation of means of introduction into a [explaining] situation of invariant paradigms will take place. The optimum of a task's solving will be increased with an accumulation of 'standard programs', provided that an acting mechanism of tradition is preserved. Owing to both [these processes, namely, to accumulation and preservation] an auxiliary activity for the unification and generalization of logical experience will be necessary.

Such historicism looks differently in Indian culture. [What seems to be quite obvious] within the consciousness of its possessors [is] a traditionalism and refusal to consider facts historically. This reveals, in particular, in numerous attempts to reduce all newly-developed methods and unknown problematic to a previously acquired knowledge, to old forms. Logical tradition, too acquires the shape of commentaries, commentaries on commentaries, commentaries of the third, etc., levels, which all together are related to a certain text and whose authors claim that a content of their works can be deduced entirely from this initial text.

It seems obvious that one can widely apply a structural method to such material. As a result, one may hope to show major features of thinking, which rules are represented by Indian logic, features, which are basically invariable in their essence, and to interpret transitions from one structural solution to another as stages of historical development of a system of thought: a conceptual definition [of thinking] by a certain list of variables does not limit freedom of inner transitions." (*Ibid.*, pp.3-4)

(5) This analysis is undertaken by Zilberman in his text 'Dialectical Psychology /On Aristotle's *De Anima*' (Zilberman's Archive, 1.7.27).

(6) Zilberman supplies this sentence with a footnote: "He operates with words, not with things. From here a problem of truthfulness [appears], as well as those general configurations which were discovered in European logic." [unpublished sentence, in: Zilberman, D. History of Indian Logic, p.157]

THE INDIAN TYPE OF CULTURAL TRADITION

1. Methodological thinking and the partial institute of Brahmanism

We initiate our analysis [of types of cultural traditions] from the Indian one not because of a particular sympathy or preference, but because it is called 'methodological' thinking, while a goal of our work is also methodological. Methodology deals with knowledge and discovers the rules of its utilization, remaining indifferent to the actions facilitated by this knowledge.

It is hard to imagine a self-sufficient human society consisting of methodologists only. However, it is probably possible to imagine and discover a partial [smaller] social group parametrically determined by [its] 'methodological' activity. In India, this group appeared to be the Brahmans. Our goal here is to show that Indian culture as a whole is determined by the following structure of transformation:

$$\frac{\text{I [idea]} - \text{N [norm]}}{\text{V [value], etc. [\dots]}}$$

In order to understand the essence of Indian culture it is important to grasp the role and function of methodological and logical thinking performed within a social group in order to establish norms of social cooperation. This allows us to determine an organic nature of traditional Indian society. The very fact that all the elements of an enormous civilization which far surpassed other primitive cultures, due to its scale and complexity, can still be an object of an effective structural-functional analysis is explained mainly by that the same structural-functional principle that was deliberately introduced into social life 'from within', owing to an activity of an institution of professional intellectuals, Brahmans, whose presence comprises a unique peculiarity of Indian cultural and social tradition.

The transformation of an idea into a norm can be achieved by methodological thinking not by means of a depersonalized vast generalization of individual historical consciousness, but, first of all, because a subject of an idea (knowledge) always appears to be a certain cooperative aggregate (even when this

subject is an individual scientist, as a product of education), who thematically determines its [idea's] content in a process of manipulation with knowledge; and, secondly, because a norm of social consensus, created by such a cooperation, is natural only within itself and [is] conventional when going beyond its limits. This is why a subject [a possessor] of knowledge, although not personalized in an anthropological sense, is always functionally determined in a sociological sense. In European tradition, such a depersonalized, but not natural, methodologism was rather the exception, than the rule. One of its purest examples, developed in theological thinking, is the legacy of Meister Eckhart. Rudolf Otto was quite right to characterize his [teaching] as 'beyond-[above]-theism', not anti-theism (1). Beyond-theism here means de-personalization, while a theistic principle [as such] is personal. In Indian tradition the same [type of teaching] was [developed by] Śaṅkarā. But there his cultural meaning was far more significant: a methodological idea of *Vedānta* became an instrument of normalization [creation of a normative foundation] of the entire social organization of a caste society in pure meanings of a mutual obligation-ness.

In order to understand the nature of regulative ideas of Indian culture it is first necessary to turn to the final result of their transformation: to the laws of logic and to their peculiar role in Indian society.

'Laws of logic' are, generally speaking the rules of formal thinking, which logicians established and explicitly expressed. These rules must ensure a universal truthfulness of the results of actions [performed] in accordance with them. On the other hand, rules of logic [are] a product of culture. At the same time a notion of cultural tradition is associated with such characteristics of any particular culture as a 'style of thinking' (or a 'typological transformation of consciousness'), which can be related to individual thinking if specific thinking habits of this culture are reflected there. A style of thinking or a transformation of consciousness of a certain group expresses a dominant tradition of this group. Any person, who follows a certain style of thinking, creates a particular system of thought, based on such a consciousness: philosophical, theological, etc. What influences his efforts in this direction is, first of all, language, which performs as the foundation of the cultural identity of the group. Forms of linguistic expression imprinted in self-consciousness are the norms which regulate behavior on a phenomenal level according to a certain scheme, and which guarantee the *stage of results* of thinking operations. In the case of the Indian culture, it can be interpreted as a transformation of 'interest' into 'temperament'. Thus, particular forms of language display a style of thinking, though they do not rule it, because of an absence of a cultural 'character' [from style itself]. This is why Indian logic has to reproduce, within meaningful transformations, the most universal peculiarities of the Indian style of thinking, to perform as its canon (but not as its organon). This remark, certainly, can immediately be applied only to a thinking activity performed by intellectuals. [But such a remark has a much broader application] since a culture of laymen in India has been always entirely dependent upon the norms and style of thinking of a group of professional intellectuals: Brahmans.

2. *The laws of logic and the structure of a group activity*

To determine a position in a group, a thinking individual has to recognize a non-sufficiency of his own activity; at the same time, however, he tries to explicate and to fix that system of reflective connections, which limits his autonomy and ties [him] to a structure of group activity. This is ensured by the universality of rules of thinking; thus, [we can conclude that] the structure of Indian logical knowledge and the traditional social structure of India (the caste system) are interconnected by a positive inverse link. A function of thinking here consists precisely in that intellectuals have been forced to comprehend their non-sufficiency and to establish rules of cooperation with members of other groups. Forms of cooperation depend on these groups, demand an integration of the entire system, and are changed every time at least one element in a system of a 'group's consciousness', or one relation between the group and an individual consciousness appears to change.

However, thinking is not only 'included' in a group structure, but is also deduced from it. Going beyond a group, thinking has no subject, is without a notion of group heritage, and any given rule of thinking cannot be recognized as effective. This is why the laws of logic have to be correlated with rules of communication within a group. Perceived from the outside, real thinking can be different. From an inner, subjective position, however, everything looks different. For instance, it cannot be claimed objectively that all people think by means of syllogisms, but it can be said that all people think by means of syllogisms if Aristotle claimed so. Our realization here is not just thinking, but thinking as an element of group activity. The Aristotelian syllogistic does not just entail rules of 'logic as such', but is a certain concrete formulation of these rules, linked to the peculiarities of Aristotle's culture. As a matter of fact, he did not claim that people think by means of syllogisms, but had a goal to create a system of rules for verifying truthfulness of utterances. In that sense all who agree with Aristotle create a supra-temporal, but inside-cultural group: an institute of [people] who 'think by means of syllogisms'. Everybody thinks in his own spontaneous manner, but if verified, institutionally [this manner can be reduced to] a thinking by means of syllogisms. Indian 'culture-creators', have another task: to explicate ideas as rules, which determine relations between realities but which do not depend on opinions about them. This task is linked to a definition of the status of normative knowledge in a finite universe of its cultural usage of things.

Any normative statement means [implies] an abstraction, similar to that utilized by Aristotle in his logical Universe: when a certain idea is created an appropriate invariant must necessarily be selected. Within such a formal approach we usually intend to think that if something ought to be done, this [something] also exists within an object of thinking. But in our case such a reassurance would mean that laws of logic literally reflect forms of group cooperation. It is quite another matter when a constructive approach is considered: invariants of a creative activity of thinking, whose intention is to organize a world according to

categories and thus reduce its own chaotic character, are pre-determined there in the sense that, not a normative, but a normalized function characterizes a lot of thinking in a group activity. That is, any generalization of a form of this activity is only a particular, concrete sort of action. With this [move], invariants of a constructive thinking are carried away: transformed into forms of behavior and symbols of culture. This [transformation] constitutes their deontic property. Such invariants are clearly manifested in certain patterns of behavior and [the realization of] a symbolic cultural function of Brahmans (the first caste of Indian social structure), those who incarnate the function (of a constructing creation).

Any interaction of construction and functioning within a culture takes the shape of a more general problem of what is normative and what deviates from the norm. The creative thinking of the Brahmans aimed at ensuring a 'meaningful absence of individuality', as an absence of anything that can possibly provoke a deviation. Culture must be constructed in such a way that any deviation [from the norm] would be eliminated all by itself, with no reflection in a societal level, with no manifestation in behavior. This problem was solved within a tradition of Brahman thinking. This is why a cultural universe of Indian society can be analyzed according to a model of correlation of philosophy and logic, when both are changing phenomenologically, but not in [their major] principles. Within a purely logical approach a task of philosophy is formulated as the analysis of the interrelations within the world of objects [things], language, and thinking, while a model of a finite cosmos of tradition is represented by the identification of these with each other by means of not taking into consideration any proper sense of one of the components. What became fully transparent as a result of this tendency in the consciousness of the possessors of Indian culture, was an idea that things of the world are not only identical with logic, but are surpassed by it (2), [in the same manner] as a system of normative culture logically precedes a system of social actions. In this case, however, a logical preceding stage acquires a real sense: knowledge of cultural universals gives a far more reliable [true] idea about what is going on in Indian society, than, say, an objective survey of public opinion, since it still remains unclear whose opinion is being expressed by a respondent and what a criterion for [his] opinion is. This is why a culturological (and anthropological) analysis of contemporary Indian reality remains more effective than a sociological one. This is linked with an absence of any such reality as an individual.

Within another orientation of the sociological approach, when logic is connected to the existence - not of an individual consciousness, but of a 'dividual' (group) consciousness - a situation is changed, and in active relation to the world it is not logic, but philosophy which moves forward. Thus, it turns out to be the result of a peculiar development of consciousness which attempts to open [and disconnect] a logical cosmos, to surpass a traditionalism of group cooperation, while logic can be regarded as quite an opposite phenomenon; that is, logic as a means of an active [real] traditionalization. A framing effect of logic forces philosophical creativity, which springs from an immediate group 'specification',

in order to manifest its individual character - and we observe a type of tradition, also created by Indian culture, but this time in a significantly different manner ('norm' — 'value'). Thus is Buddhism. However [this is still not a radical break from tradition because], taken logically, i.e., from inside, as a certain characteristic of a group's creativity, this differentiation, as well as any act of departure within Indian culture, inevitably assists traditionalization and closes a part of the universe; [that part, which] previously remained beyond philosophical influence. This means that Indian tradition is unconquerable from the inside, and any inner rupture would only strengthen it. As a result of a mutual influence of philosophy and logic in the course of history, increasingly fixed features of Indian thinking (very significant for a creation of society and culture) have been crystallized. These characteristics can be presented as the major invariants of thinking, a formal projection of which [of thinking] is logic:

1. Universalization of abstract notions on the level of consciousness and, connected with this, elimination from it [consciousness] of opinions [conceptions] about [anything] individual;
2. Manifestation of this consciousness in structural forms of a group activity at phenomenological level;
3. Negative absolutization of this structural principle in culture and a certain reverse clarification, on this basis, of the idea of non-temporality; i.e., transformation of the analytical property of consciousness into a regulative principle of consciousness;
4. Subjective position [taken with respect] to any organization of experience as the only one possibility of combining the first invariant with the third one;
5. Objectification of reality in the sense of its extreme intellectualization by means of expanding a reflective activity to a state of a non-distinction of consciousness, and being thus within a group status.

3. Phenomena of thinking; behavior and form of consciousness.

The universality of Indian thinking was most clearly reflected at the level of unconsciousness, i.e., in language. Sanskrit, the language of the Brahman's culture, has no comparison due to its abundance of abstract notions (names and actions), not only in a specialist lexicon, but also in common utterance too. For instance: "*putnam vrksatvenopāvarnataḥ*" -"This man has been seen [sitting] on a tree" means literally: "Man, sub-characterized by a tree-ness". An individual [something] is always expressed in Sanskrit as a particular case of the universal. Any 'name' is an abstraction, universalia, 'pronoun' ('something, possessing a place'). Rules of a definition of terms and quantification, which in formal logical calculations are always specifically [deliberately] explicated, exist here as if in a natural sense-understanding (3). This is why Indian formal logic has been developed without quantums and does not have an idea of [logical] class (4). This can explain the development of abstract chapters and notions of mathematics, earliest, among

those recorded in history, later spread beyond the Indian culture (zero, algebra, theory of multitudes, etc.). (5)

An individual for Indians is always a limit of the minimization of a particular in a logical sense (*antya viśeṣa*). A Sanskrit equivalent of individual is a 'revealing', 'phenomenon' (*vyakti*).

It has been claimed in discussions between Indian individualists (*vyaktivādinaḥ*) and universalists (*jativādinaḥ*) that universal is conceptual; while particular is deducible; and individual a limit of deduction (6). We would not find there anything similar to discussions of medieval European nominalists and realists, since the major thesis of nominalism simply cannot be manifested in language. (7)

But individuality still can be maintained in a strict religious sense (which nobody dared to do on the West). After Pelagius, those who believe in God-Creator do not consider an individual soul to be created by God. God creates only material objects, including human bodies. But soul is co-eternal to God (8). Buddhists regard each person as a potential Buddha. But they teach about an eternal individuality only in a logical sense; while in an existential aspect, any individual is a 'thing in itself' (*svalakṣanam*), a moment in this situation, but not a moment of duration, so, together with a life of body consciousness of 'I', it creates a limit of a particular.

Such an interpretation of an individual characterizes not only philosophical consciousness, but common sense too. Europeans extract an abstraction from a more immediate peculiarity or individuality (as an experience of fact), while Indians do not imagine abstract notions as [being] included into empirical data and stacked together therein to the extent that an essential principle of substantiality is often reproduced as a simple form of a plural number. Since the meaning of individual and particular is deduced from the universal and realized within it, any distinction between a possessor of a property and the property itself, between a form of substance and substance itself, is not realized, and, correspondingly, a common noun often becomes a property of an individual (for instance, Buddha).

Such linguistic phenomena prove that Indians do not realize a sense of judgments of heredity and attributiveness. The very form of a judgment, always linked to an evaluation, is beyond their awareness. Whereas Plato, when starting an analysis of 'virtue [good] as such', analyzes primarily the virtues of man, woman, child, slave, etc., i.e., gives a particular evaluation, according to the axiomatic procedure of Greek consciousness ('value' – 'idea'), in India a notion, expressed by an adjective, is much more important than an individual determined by it; the meaning of individual is reduced almost to nothing. This is why it is unreasonable to hastily judge Indian culture as having a 'narcissistic', 'introverted' human psyche. (9) Any psychoanalytic explanation does not work here simply because enumerated manifestations of consciousness (as well as properties of memory) are not characterological peculiarities. 'Psychism' here is meant to be a thematical, 'dividual' one; it cannot be entirely materialized in individuals, who lack such a property as character. (10)

The non-characterologicalness of Indian behavior is closely connected to the third invariant mentioned above and to a corresponding preference of the negative in consciousness. For instance, in language: *apeka* - 'many' (literally, 'not-single'), *'advaita'* - 'single' (literally, 'not-double'). In Brahmanism, directions and canons are seldom cited in a positive form; in the last resort, as volitive inclinations (in *Laws of Manu*) (11). In the Buddhist "*Vinaya-Piṭaka*", directions are given to monks only in a negative form (12). Indians can even discover foundations of morality in the negation of habitual human activities. Meanwhile, all the [Jewish] Prophets, as not sufficient subjectively, experienced a negative form of the Ten Commandments, until transference to positive ethical statements in the Sermon on the Mount was finally undertaken. Negative constructions predominate in a common language too. For instance: *adassanam maccurajassa gaeche*, "*Dhammapada*", 46 (literally, "Enlightened is going to have a non-meeting with a King of Death") (13). Indians considered a negative form of judgments to be not merely negative, but rather a positively-assertive one. This is why a general-negative statement is not utilized and is considered in Indian logic only in a transformed form of general-assertive statements (*anitya śabda* - (all) "words are not eternal". (14).

Precisely in this fashion all absolutes are perceived as negative. This, in turn, creates a striking contrast with the Hellenic idea of a flowing, spherical Absolute ([idea revealed, for instance, by] a Pythagorean statement, "A definite [something] is more perfect than an indefinite [something]" (15), or by Plato's interpretation of ideas as *prime*-images, etc.). For Indians an idea that is not perceived sensually is Absolute; it is a rational idea of 'metaphysical' methodological consciousness. Similar opinions can be found in Western philosophy too, but without such a social resonance. For instance, Scot Origena wrote: "It would be not non-rational to designate God - Nothingness, because of its transcendency." (16) However, he still considered God to be absolute and only refused to ascribe attributes to him. Indians, on the contrary, regarded a personal principle of God as [placed] immeasurably lower and [being] more limited than the Absolute. According to *Advaita-Vedānta*, God (*Iśvara*) is *Ātman* (Absolute) delimited by the power of its own *māyā*. *Māyā* is a non-personal ability; its power transforms the world into a phenomenon. A principle of *māyā* is naturalistic, but its Absolute is not. It is modal, although above-personal (17). This is why an ideal of *Vedānta*, namely, a merging with the Absolute, is by no means equal to a vast cosmic extension of consciousness. However, this is not a Hegelian normative monism of a notion, which annihilates an individuality by/through its 'historical' pressure. That is why a negative grasping of the Absolute results in a denial of its negativity, not of a freedom of a cognizing person. Here freedom is at the beginning, but not at the end; a necessity is born from freedom, but not *vice versa*.

The negativity of consciousness determines that interest which Indians always directed towards understanding human behavior. What is revealing is their affection towards the unknown, perceived from outside [of this culture] as an

'esoterism' (an allegory of statements). Structural-negative descriptions are widely practiced there. For instance, as Nāgārdjuna, a great Buddhist philosopher of the 2nd century AD, explains: "Non-cleanliness [purity] cannot exist independently from purity, so we explain cleanliness by means of non-cleanness. Cleanliness as such is not graspable. Cleanliness cannot even exist irrespective of non-cleanness, that is why we explain non-cleanliness by means of cleanness". ("*Mādhyamaka-Kārikā*", XXIII, 10-11) (18).

These specific peculiarities which led to a minimization of individuality received its theoretical substantiation and acquired a character of a cultural norm; therefore, forms of behavior corresponding to them were perceived as non-real. This brought a specific valuable relativity, more correctly, a non-distinction of values. As Megasphen noted: "(According to Brahmans), what happens in human life is neither good, nor bad. For, if the nature of a thing or action is turned towards good or bad, where does a difference between people, whose ideas are more or less like a dream, arise, why are some satisfied by the same thing or action, while others not?" (19)

A realization of a cultural norm leads to thinking become static (Albert Schweitzer was right to turn attention to an 'inner peace' of Indian thought (20)); an absence of a notion of time even on a level of 'common sense', a contemplativeness of temperament, a passive and tolerant attitude to any non-ritualized behavior, a lack of a notion of effective or formal reason follow from this (compare this to "Formal reason is regarded to be not a word, but a deed" (21)). Such specificities of intellectual interest, peculiar to a methodological attitude, which is not obliged to [be connected to] practice, determines the barrenness of attempts to modernize Indian society according to a Western pattern. All innovations, as a rule, turned out to be illusory: either in economics (22), or in psychology (23), or in both collective and individual consciousness (24). Exceptions were rare and most often had an imaginary quality (25). This is the opinion of the majority of sociologists and anthropologists who investigate contemporary India (26)

To a great extent this situation is connected to a lack of a personal responsibility and intersubjectivity[. . .] Indians never regarded objective reality as a substratum of their mental activity (since $\frac{I-N}{V}$).

Although an accusative case points to an objective relation, Indians in their self-reflection do not perceive themselves objectively: *parabhavisyanti manye* -"I think, (he) ought to be someone, who will pass away" (i.e., "I will die"(!)).

An unlimited extent of reality, named 'Oneself' (*Ātman*), develops a tendency not to regard another subject as an independent actor, someone, who confronts himself. It is clear that in a case of generalization of such a type of consciousness, a postulate of a symbolic interactionism will not be justified. This consciousness also explains the non-aggressiveness of Indians, a moral equality of *varṇas*, a lack of a notion of a social class, and an organismic structure of society. An organic integrity of society does not mean, however, its moral-political unity. On the contrary, it is difficult to find a society more particularized in a

sense of concrete moral orientations and political goals than the Indian one. Although it achieved a significant degree of social differentiation and value specification, Indian culture still remained an organic culture. This became possible because of the wide spread of the Vedic ethic of non-duality, according to which everything 'different' was interpreted as a part of 'itself' (but not as 'ours', as different from a normative authoritativeness); hence, the main injunction of an ethical code, to give pleasure [good] to others; an injunction, linked to the development of a system of cooperative [mutual] aid (27)[. . .]

A subordination to universal standards of culture, manifested in a general social temperament, does not have the nature of normative pressure. *'Dharma'*, i.e., a cultural law, possesses a purely existential status of an idea and lacks any deonticity of an action. To follow *dharma* is normal, but not normative. This is most evident in the religious sphere: an immediate link of every individual to the Absolute, his (her) own way of salvation, an absence of church and a possibility of political power for Brahmans, etc. Religious salvation is understood as an equation: any person saved by a mercy of *Amitābha-Buddha* was commensurate to the Savior [in all senses]. An extreme intellectualism and an intellectual rationality of Indian culture (i.e., non-common-sensible, not based on values preference) can hardly find parallels with other cultures. Connected to this is a wide dogmatic tolerance, a co-existence of opposite ethical systems, but with the most rigorous 'orthopraxy', not having anything in common with an ideal essence of *dharma*.

A consistent intellectualism determines a nomothetic character of Indian knowledge. Interest in a form of universal idea, which [idea] becomes a norm of consciousness, predestines a conclusion about the uniqueness of this idea. It is well known how excruciating this problem was for Plato. Having admitted an idea of a 'head', he should logically assume an idea of 'hair', etc. Plato was indecisive about the very reality of his 'ideology' [. . .] Indians had quite a definite opinion about this: an idea is a unique one, as, for instance, ideas of *'dharma'*, 'good', etc. However, this does not encompass political ideas, such as 'nation', 'state', etc. Although a vast knowledge of political science, and economics, etc., was accumulated in India, these ideas were not taken as existing in their contemporary understanding. This was so not because Indians did not 'suspect' their possibility, but because they were absolutely convinced of their theoretical impossibility. (28)[. . .] On the other hand, theoretical disciplines related to an analysis of *'dharma'*, i.e., those important in a religious-philosophical sense (logic, mathematics, semantics, and, finally, systematic philosophy) were developed in India quite substantially. Such a preference reveals an intellectual character of Brahmanic culture. But historical and ideographic disciplines could not be developed because of a complete awareness of the non-reality of a separate fact [. . .]

The almost complete absence of an interest in natural sciences in Indian culture [. . .] was predetermined by the alienation of methodological consciousness from the 'objective' world of nature. Some interpreters are obviously not

right in trying to explicate an Indian mode of existence as 'cosmic' (29). It certainly is not an historical one, but at the same time this mode is far from naturalness for it is extremely symbolic. This was revealed in the absence of an idea of order in the objective world of nature.

As already pointed out, a causal explanation is limited for Indians by a formal causality and, in fact, is closer to occasionalism. In language, it has been manifested by a complete lack of syntax, and of a possibility of utilizing words of any length and with any degree of a constructive complexity. In art, it reveals itself in a phenomenon of a creation without 'models', according to a certain 'ideal perception'. An Indian imagination does not differentiate actual and ideal, fact and fantasy. "If there is a place on Earth, where dreams of an ideal existence, cherished by mankind from the earliest times, could be realized, this place is India" - wrote R.Rolland. (30) In addition, Rolland was right to note that Indians are not realists, but 'creators of reality'. Their favorite method to designate the unimaginable is a quantitative irony. For example: "*Kalpa* (the world period) is the time necessary to grind down to dust a mountain with a base of 3,000 sq. km, by means of one rubbing [the mountain] with a muslin kerchief in 100 years. The world cycle (*mahā-asaṅkhyeya-kalpa)* is equal 3×10 / 60 *kalpas*." (31) Such methods, revealed, with all their grotesqueness, a peculiar realism and an understanding of the limited capacities of the human mind. But in those spheres where notions of truthfulness and verification are not absurd, a rational strictness of the Indian mind was fully demonstrated (logic, linguistics, reflective psychology, etc.)

4. *Knowledge* - *the major subject of analysis in the sociology of Indian society*

Depicting Indian culture by taking its creativeness and typical behavior into consideration, as well as the possibilities for a constructive realization of its type of cultural tradition, does not prevent us from answering the question to what extent is this model the 'ideal' one; i.e., how much does it differ from a 'real situation', which can be recorded, for instance, by objective sociology? [. . .] For an answer, it is necessary to give a brief historical and sociological interpretation of the peculiarities of Indian culture and its tradition[. . .]

We are unwittingly inclined to project the social reality of a developed Indian society, where invariants of a cultural tradition are quite manifested in that 'non-organized' (or differently organized) matter, from which the reality came historically. It is hard to analyze this matter. What does seem possible, however, is to observe some fragments there, which more or less influence the universal.

A style of thinking in ancient India is usually regarded as more plural than that of the style of thinking in the classical Hindu age. An activity of such thinking, not yet sufficiently unified by a culture, was based on analogies. Analogical thinking, already a constructive thinking, is rooted in an imitative behavior; i.e., in a reproduction of the same old forms of activity according to

external patterns. Habitual models of [such an] activity are cosmic processes and natural situations. De-naturalization is undertaken by means of an analogical spreading of the rules of action of human organization onto the entire Universe, which made it [the Universe] understandable in a traditional way.

At its first logical stage imitation implies a total identification of an actor with a pattern; i.e., analogy is understood in a limitless fashion: as similarity. Together with an assumption that formal, not content, similarity is needed for reproducing universal links, realization of the possibility to identify certain things can be regarded as a peculiar structural transformation of a [previous] scheme of consciousness, [a transformation] that strengthens its [consciousness's] constructive function, and thus leads to an ideology of methodological traditionalism. In order to realize such a transformation, thinking must, first of all, 'exceed its own bounds'; i.e., transfer the properties ascribed to itself as immediate symbolic representations onto exterior objects, which do not comprise a content of sensuality, i.e., onto 'ideas'. Let us call this an 'inflation of thinking', since it is connected to the objectivation of its symbolic representations. Secondly, these ideal objects ought to create a model of social relations structuralized according to a traditionalistic pattern. An exit from itself ('by analogy') means an establishment of a particular correlation between cosmic patterns and concrete cases of behavior. It implies a necessity to analyze and verify an achieved correlation and, thus, a mediator (a model of a second rank) and efforts at methodological consciousness, a no longer cosmic 'Hellenic' cell in a peculiar cultural sense, becomes necessary. A model, which liberates reflective thinking from the necessity of a monosemantic attachment to cosmic patterns of identification and purifies it in analysis, appears to be the *Veda*. By placing the *Veda* between the cosmos and itself, reflective thinking can put an end to its own inflation and pass to a stage of 'universalization' and, later, to analytical 'reversion', and, thus, initiate construction of abstract formal schemes, with which any meta-logical content can be compared. This move allows us to surpass a cosmic 'plurality' of a Hellenic type, where, because of its initial, simple dual opposition of a valuable choice, a need in methodological analysis does not even appear. This surpassing, however, unfolds not in a direction of a certain 'regulated' utilization of the *Veda*, not as a realization of its 'concentration on something given', but as a methodological constructivism, as an 'unfolding in everything'.

Thus, we have the following scheme of a 'cultural challenge', which started in India at the age of the so-called 'axial time' (7^{th} to 5^{th} centuries BC):

I	O	II
plural society		unitary society
inflation of consciousness	universalization	reverse of consciousness
value – idea		idea — norm
'Hellenic' type		'Indian' type

An activity of reflective thinking, which was liberated owing to the model, the *Veda*, becomes directed to a perfection of the very mechanism of a traditional

social organization. This mechanism depended on a method of counterpoising of an absolute ideal origin [source] and individual behavior. It is important to note that individual behavior can still safely escape methodological analysis (since 'metaphysics' of this nature is 'value', 'character', etc.). A liberation (and an explanation) of this nature inside Indian culture was undertaken by Buddhism

$$\left(\frac{I - N - V}{V}\right),$$

in a recurring pluralization of norms of human behavior through a symbolic transformation of family rooted ideas (quite powerful in those social groups, where Buddhism initially appeared).(32) Another alternative of further transformation was a development of a normative-feudal, authoritative type of management: a utilization of the Veda as a 'code' (*niyati*: I – N – I). This possibility was not realized in India, although it was quite successful in Tibet [. . .] In India itself the scheme of methodological consciousness remained an 'eschatological', i.e., a finalist-traditionalist one. This consciousness gradually, together with a development of the very institution of Brahmans, supplanted both Buddhism and state authoritarianism. Such a traditionalization was unfolded simultaneously with an improvement in logical rules of reasoning which entirely excluded the possibility of non-methodological behavior within Indian culture. This is why, on a relatively developed level of social organization, inside which such a principle of consciousness is effective, the more and more weak and abstract efforts to establish norms-setting and to correlate segments of social activity methodologically in both subordinate and inventive senses appears to be necessary for thinking. Thus, a non-violent social organization, which, because of its sociological definiteness, has no comparison to any other, and rests on consent to what has already been achieved, was created. In order to understand why this happened it is important to analyze the circumstances that made the *Veda* the foundation of Indian culture.

5. The Veda and a problem of differentiating knowledge

A peculiarity of *Vedic* literature is its solely oral transmission in a culture. Different levels of religious-philosophical thought can be traced in the *Veda*, including that peculiar stratum, which is linked to a performance of different sacrifices, where certain *Vedic* statements are deliberately extracted from a context and utilized only as sacrificial formulas. (33) Sacrifices had such an immense importance that the very acknowledgment of an independent existence of the Gods faded. *Vedic* formulas (*mantras*) themselves became possessors of divine power, while a sacrifice was considered effective just because of a punctual performance of all sacrificial actions and a phonetically correct pronunciation of mantras. A school of philosophical exegesis – *Mīmāṃsā* (34), theoretically reflected this circumstance. *Mīmāṃsākas* claimed that all *Vedic* statements and

the *Veda* as such had to be understood and interpreted in a deontic sense, i.e., as 'orders' [commands] ('*vidhi*'), or 'prohibitions' ('*niṣedhà*), irrespective of their literal sense. All narrative fragments in *Vedic* literature were proposed to be considered as rhetorical figures, which just emphasize *Vedic* commands. It was assumed that these narrations (the so-called *artha-vādas*) did not possess factual authenticity and were not evaluated with respect to the trustworthiness of their content (35). This interpretation appeared to be a dominant one. The described transformation of the initial sense of the *Veda* can be illustrated by the following typological transformation:

$$\frac{\text{idea} - \text{norm}}{\text{value}}$$

This transformation characterizes an undergoing, within a consciousness, a reorganization of notions (i.e., of ideal senses) into normative sentences; it becomes possible through a peculiar loss of its semantic signification, i.e., of a literal meaningful content of *Vedic* sentences, which did not refer to what is denoted. This is quite an important transformation: it has initiated a universal mechanism of Indian tradition.

Mīmāṃsākas fully utilized the *Veda* as a model of the entire normative culture and linked it to a ritual. This model was made of a word's material, but sounds of the *Veda* acquired some non-vocal qualities. An important circumstance, which was philosophically formulated by *Mīmāṃsā*, but acknowledged much earlier, was a statement as to the non-creativeness of the *Veda*. *Mīmāṃsā* recognizes neither God, nor creation. The *Veda* is eternal. An ancient tradition claims that prophets of the *Veda* were *riṣi*. However, they were not considered the authors of *Vedic* hymns: they were somewhat similar to instruments for its performance. An interpretation of the *Veda* as a reality which excluded time [i.e., did not have a temporal dimension], quite obviously reflected universality and a lack of individuation (a principle of a 'lack of authorship' - *apauruṣeya*); [we can interpret them as] peculiar invariants of Indian thinking.

Regarded as a symbolic equivalent of the *Veda* was the non-divided and eternal syllable *AUM*, which combined the principles of beginning, preservation, and termination. With this syllable, the *Veda* acquired object-ness, since a syllable could become an object of immediate religious contemplation. The *Veda,* therefore, was interpreted by religious thinking not just as ordinary knowledge, but as [knowledge possessing] transcendental sense, which was denied a possibility of a cognitive analysis. At the same time, the *Veda* could still be studied; therefore, the attitude towards the *Veda* was contradictory. On the one hand, an understanding of the importance of mastering the *Veda* was clearly present; [moreover, it was considered] as a key activity and an organizing reality of religious life. Nevertheless, such an interpretation was not regarded as a foundation of religion. In other words, there were two contradictory principles when the *Veda* was concerned, namely those of a social organization and of a cultural institution. It became a special task of etymology as a science to find a way out

of this contradiction; this was the first case of a quasi-logical reduction of a philosophical problem. (36) Etymology, or an interpretation of *Vedic* statements, is a discipline characterized by an insightful attitude with respect to its subject. It happened because of the necessity to preserve a special object within a culture, an object that served as a religious symbol. From outside, the ambivalence of these functions of the *Veda* became a topic of discussion. [It was precisely] a methodology of this discussion [which] later gave rise to Indian logic. Thus, from the point of content, Indian logic is a result of a methodology of discussion, whereas from a position of expression, it is a product of etymology. The presence of these two springs creates the major distinctive feature of Indian logic, as compared to ancient Greek logic. At the same time, this peculiarity is linked to important social-cultural circumstances.

A comparison of the *Veda* to Greek myths shows that the *Veda* is not a myth, although mythological elements are definitely present in its content. The *Veda,* as such, is an object of a religious cult, but at the same time, it is a symbol of social organization: a means of an operative determination of social status and, in general, an object, with respect to which it is necessary to perform certain actions in order to place [someone] inside a culture. The *Veda* is simultaneously God, a system of knowledge, and a means of communication, i.e., language.

It is impossible to say that the *Veda* was just a collection of myths in the beginning and that it later lost this characteristic. Strictly speaking, the *Aryans* did not bring the *Veda* into India. As it seems, Indians had some cycles of myths before the invasion, but in the process of their social-cultural merging with a root population, the *Veda* was formed as a mark of a peculiar social status and acquired the function of consolidating Aryan society. The *Veda* demanded a specific treatment as an expression of group loyalty. If we compare it to the Bible, we see that it relates rather to God of the Bible and not to the Bible itself. This was reflected by one of the three possible interpretations of the *Veda;* i.e., as an object of worship. Two other projections of it were knowledge and ritual. As we see, in this case the reincarnation of God in the Word has a direct and literal sense: Indian culture is the uttermost 'logical' one.

The Aryan minority, having obtained domination over the a limited territory of Hindustan, found itself in a very unfavorable situation for preserving its culture. Many realities of the previous culture were dissolved, except those, which, being emblematically reflected by the *Veda*, assisted in creation of a social organization with a rigid structure, [organization], which could oppose its dissolution and within which a problem of a value orientation with respect to functional elements of this structure became urgent for any individual or social group. On the other hand, a norm of preferential choice, that determines a relation of individual or a group to themselves as to the very same elements led to a problem of 'non-leaving a certain position' [with its simultaneous departure]. This is why the *Veda* was codified and why it acquired a role, which is hard to find anywhere else.

God of the Bible, having made an ordinance with a chosen people, acknowledges a people's right to temptation and deviation, as means to maneuver in certain

historical circumstances. This was natural, since His chosen people were not ruling people. In India it was vitally important to ensure an authority of power; this is why the very idea of temptation had to be eliminated from consciousness. The main difference between 'historicism' and 'traditionalism' is that 'history' is necessary in order to conquer a power, while 'tradition' is necessary to preserve it. The 'divine sound', having spread throughout the sub-continent, was correlated, at the same time, with any universal origin, whether physical, social, or psychic. Since the *Veda* had a form of statements [expressed] in a certain language, all these worlds were considered to be reincarnations of Speech, and language appeared to be in the epicenter of forming culture, first and foremost, as an instrument of prestige.

The *Veda* was not the property of all the social groups of ancient Indian society. Brahmans became its major possessors and persons in charge. *Varna* [a caste] of Brahmans appeared to reach such an ultimate point of reading that it became a model for the actions of any other group of Aryans, and later for the whole of Hindu society: without this model it became impossible to determine the status [of a person], or [to ensure] a normal social life. (37)[. . .] To preserve this situation, a norm of oral transmission of the 'divine knowledge' [of the *Veda*] was established, and remained one of the most important measures of such preservation, although writing existed by that time and was widely utilized in society. Within such a type of transmission this knowledge can be presented part by part and can be measured according to the will and discretion of a person possessing it. This form of the tradition of knowledge became universal in India [. . .]

A totality of knowledge fixed in *Vedic* texts and distributed within different Brahmanic schools appeared to be directly corresponding to the organization of all ranks of social life. [This was so] because only Brahmans were allowed to maintain, according to *Vedic* patterns, the system of social management. The same motives for aryanization existed for the higher and lower social groups; thus, any social group could acquire -owing to this -a possibility to be determined socially and economically, and to determine its caste position within the topology and semantics of culture. This gave social groups a right to exercise a monopoly over a professional occupation and a style of their previous pre-caste life[. . .]

No social group, even the lowest one, could be evaluated in comparison with others; on the contrary, it was perceived as an optimal 'in itself' and necessary 'for others'. Insight of a low-positioned *Sūdra* about his *varṇa* was estimated neither lower nor higher than that of Brahman. To cease to be 'in such a position' for him meant 'to stop to be' at all. This circumstance is reflected in a certain transformity of traditional culture, where senses are transformed into norms, while valuable [meaningful] relations remain hidden in consciousness (38)[. . .]

Any anti-Brahmanic movement, i.e., deviating from *Vedic* norms, was deprived of the possibility of social realization, because a synonymous correlation was maintain between thinking, the *Veda*, and the objective world. A deviant group or individual, after falling from the Universe's 'ritual context', from conditions of the 'world game', and, thus, from society built on the authority of the *Veda*, was not in a position to annul society and, therefore, they found

themselves in a situation of semantic uncertainty; i.e., of the absurd. Any further definition of such a situation depended entirely on choosing a strategy of behavior by this given group or individual. The more it deviated from Brahmanic instructions, the more 'unclear' was its perception by society. This led to a lowering of the group's position in the hierarchy of prestige. The uncleanness of a group or an individual played a crucial role in their correlation to other groups and individuals; similar characteristics [when 'uncleanness' has been concerned] led to the creation of a certain caste, with peculiar ritual properties, which were equivalent to a notion of logical class ('*jati*': 'caste' or 'logical class'). The group itself, therefore, did not chose its 'ecological niche', but rather found it 'interactively'. What was necessary to transform a group into a caste was simply to show an interest in marking its social level as higher or lower than that of others. That is why Buddhism, which did not aspire to establish any system of social identification, was expelled from India after 1500 years of existence. Its disappearing led to a dominance of Hinduism, whose principles were lifted to a high degree of logical definition and sociological clarification. [What happened was] a complete mutual reflection of structures of society and culture according to a principle of 'reverse perspective'. This is true, first of all, when applied to a sphere of consciousness. If an object of sociological analysis generally appears to be public opinion, then here its equivalent is a differentiated knowledge, because social relations were reflected not in opinion, but in reliable and objectified knowledge. Such knowledge is characterized by an exceptional exposure to concepts of universalism, realism, negative (i.e., non-own) definition of notions (as a result of semantic inversion: 'prescriptions of the *Veda* — truth — existence')[. . .] It has also been marked by an aspiration to be the operational representation of structural parameters of knowledge as such, which is a characteristic of purely logical problematic [. . .]

There was only one gap in *Vedic* ideology, to fill which creative thought of Brahmans was directed. This gap is connected to a principle of power, which in fact exceeded the bounds of the hierarchy or a gradation of status and was hardly explainable in notions of a ritual cooperation. Any ideology organizes facts rather than simply reflects them. A realization [interpretation] is always linked to a choice of a certain intention, to the detriment of others. The appearance of 'supplementariness' could lead to a contradiction, since what was at stake was a universal organization of a society based on a single principle: *Vedism*. On the one hand, power exists in the society, on the other, a theory of hierarchy cannot admit power as such without a conflict with its own principles. This is why what is left is to assign to power a place outside consciousness, as a 'meaningful absence', a multiplied zero.[. . .]

To preserve a principle of the absoluteness and uniqueness of *dharma,* Brahmans undertook a complicated re-thinking of the value of power, having 'eliminated' its sign nature (i.e., its 'character', in our terminology), and codified the result of this elimination within a culture, i.e., in the *Veda*. This was not a

viable option for a church organization of Christianity. Religion in the West, therefore, degraded into a 'cultural' institute and declined, whereas in India it spread to the entire social organization, as a partial institute, and blossomed, despite social differentiation. As was already pointed out, the oral transmission of knowledge permitted the Brahmans to show only that part of their knowledge which was allowed to be 'revealed' to commoners for their accommodation within the social hierarchy. This is an external cultural function of the Brahmans. Concealing and monopolizing the *Veda,* however, were not linked entirely to circumstances of ritual initiation, sacralization of status, etc. If we compare the *Veda* to the New Testament, we clearly see that the New Testament contained rational ethical orders, whereas the *Veda* not only has nothing of that sort, but, on the contrary, tells much of what the Hindu orthodox should never commit. The ethical world of the Veda is a realm of divine heroes and poets, a sphere of struggle between magical forces, and a revelation of power. The *Veda* does not teach anything really significant about how to live in Hindu society, rather, it rejects its *'dharma'*. This is why an indispensable condition of the absolutization of the normative authority of the *Veda* should be a complete oblivion of its own sense and meaningful content, an appeal to a primacy of power rather than to priesthood.

The semantic transformation of the texts of the *Veda* became an inner, reflective function of the Brahmans. Their content ought to be represented not in an apodictic modality of mythologies, but in a deontic-normative [modality]. This operation appeared to be a subjective side of Indian traditional transformity as a scheme of traditional conversion of ideology. This scheme, thus, became universal both in the case of the organization of exterior prestigious orientations, and in a situation of the inner manifestation of the cognitive intention of bearers of a 'code of prestige'. Practically, it means a universal recognition of the authority of the Brahmanic tradition, based on the *Veda*, knowledge of which can be demonstrated as a superior means of evidence. As a result of the intellectual and organizational efforts of Brahmans, the ideology of *varnas* (a model of culture) and the ideology of castes (a model of social organization) grow from one root, as two trunks, visible and invisible.

The initial formation of Indian society was undertaken mainly as an external intake of structural elements and a cooperation of activities of pre-caste tribes. A creation of culture as a mobilization by Brahmans of the invariants of their group's thinking in the course of settlement of inner conflict with power was unfolded as a manifestation of a normative structure of this thinking. This is why the *varṇa* of Brahmans became a fundamental, and at the same time, partial institute of Indian society, without which it could not exist. No other *varṇas* and castes can serve as determinatives of social ranks, either for themselves, or for others[. . .] The institute of Brahmans is the most important, because it is necessary for an institutialization of all others; it looks as a reincarnated tradition itself[. . .]

6. *Problems of the epistemology and sociology of cognition*

We will analyze some characteristics of the epistemology of the Indian logical school of *Navya-Nyāya* (12^{th}-18^{th} centuries AD). *Navya-Nyāya* claims that an idea of true knowledge has to be placed at the foundation of any system of metaphysics. At the same time, a definition of the truthfulness of a cognitive act does not have a metaphysical nature, i.e., is not regarded a condition of human activity. This definition is ruled by an agreement; therefore, the orientation of individual involvement in cognition (an 'intention of consciousness') cannot serve as a necessary prerequisite in order to determine the truthfulness of an act of consciousness. Human nature usually appears to be satisfied after several correct steps have been undertaken to prove the truthfulness of a certain initial fact of consciousness. For instance, a man, when he sees water, hurries to it and quenches his thirst. Does he still have any doubt in *truthfulness* about his initial perception [of water] after this? Such an ability to be satisfied by a solution, which from a 'theoretical' point of view is not complete, has to be recognized as an ultimate or ontological property of human nature. In order to reason about the conventionality of the referents of consciousness, is important to understand why, in Indian epistemology, despite a long discussion, nothing similar to Plato's 'ideas' was accepted. According to *Navya-Nyāya*, (its founder, Gaṇgeśopadhyan, who lived in the 12^{th} century AD, repeats in this part the ideas of Śaṇkarācārya, who lived in the 8^{th}-9^{th} centuries AD) ideal constructions of consciousness (*jāñani*) are not given unconditionally: they are built as an auxiliary symbolic means of communicability. This reasoning strikingly coincides with an argumentation of contemporary methodologists of science. However, with respect to the sociological foundations of truthfulness, Gaṅgeśa thinks that any judgment about perception represents its object in the form, "This is so and so", but not in the form, "I know that this is so and so". Since a function of judgment consists in an initiating a mechanism of verification, it clearly becomes fully evident to presuppose that a judgment can belong to individual consciousness. Gaṅgeśa admits that the realization of perception is not discursive, but intuitive. In the very act of perception, there is neither a question, nor an answer. While in an 'indefinite' mode of perception, an individual consciousness can recognize not only an object subjected to definition, but also a predicate, although a relation between them remains undetermined. Then an act of 'definite' ('methodological') perception, which has to connect their relations, follows. Two or more related terms create a structure, called 'knowledge'. Each term occupies a certain position within this structure, and precisely a localization makes it either object, or predicate. Thus, knowledge does not have its own form (shape) independent of a situation of its utilization. This is why notions such as 'idea' or 'notion' were considered abundant in the logic and epistemology of *Nyāya*. They do not influence consciousness immediately (N – I – N). Objects are cognized not by a means of content representations, but by a direct turn of consciousness towards traditional categories, placed outside an act of

the utilization of knowledge. Together with this, *Nyāyaikas* claim that truthfulness is connected to a falsity of principle of structural opposition. This or that function is ascribed not to facts of a real world, but to judgments about those facts; i.e., depends upon something [which is placed] outside judgments. A subject of experience is not a component of a 'cognitive complex'. He is busy with a systemic activity focused on organizing objects of experience: creating a certain order out of them. An initial irrespective [?] consciousness is transformed into a reflection of a relation, which is sometimes called 'judgment'. If objective referents of created judgments terms are identical to the elements of a cognitive complex, while a relation between terms of judgment reflects a relation between the elements of a complex object, and the direction of the relations in both cases is the same, it is stated that judgment is adequate (truthful). A case of non-correspondence ('non-construction of knowledge') is interpreted as falsity.

Since notions of truthfulness and falsity are not applicable to immediate, or intuitive, perception, 'cognitive complex' corresponds not to an individual cognizing subject (which is regarded as self-understanding in Western epistemology), but, so-to-say, to a 'dividual' subject, the most closely represented by such a situation of elementary social interaction as transference of knowledge through learning. Any process of learning consists of a series of joined efforts by a teacher and a pupil to create accurate judgments and is considered to be finished when the pupil stops making systematic mistakes, or finds his own way to organize the terms of a judgment into a structure, which he is able to interpret as a variety of the teacher's methods and to communicate about it. In both cases a necessity of cognition and a cognitive function of the pupil are exhausted, since mutual communication has been realized. [This happens] when rules for constructing 'true' knowledge which satisfy both parties are found (if to use an ontological example with water, 'thirst is quenched').

What is meant with 'true' knowledge? Certainly, not the individual experience of the teacher, since knowledge is impersonal. However, reacting to a variety of constructions of knowledge which the pupil has proposed, the teacher can answer: "Yes, this is so: it can be represented in this way too; this also happens!" The teacher means to give the pupil an opportunity of cognition; and his acceptance of knowledge now indicates that he is ready to consider this possibility differently, i.e., to compare it to this, but not to that set of cognitive constructions. The teacher changed a pupil's perception of things, and now they reach an agreement.

A perception of knowledge acquired by the pupil and confirmed by the teacher is a source of its correct utilization. Both *Vedāntins* and *Nayāyaikas* agree that individual perceptive consciousness cannot in any way be a source of true knowledge, since immediacy is not inherent in individual consciousness, either individually, or universally. Organs of the senses, i.e., those instruments generate a common perception, that could provide us with an adequate perception, but could also distort it. An adequate perception ('thematic apperception'), thus, is always 'dividual', i.e., generated within an act of 'thematic communication'

(learning, etc.) Such a relational logic constitutes an idiosyncratic sociological foundation of Indian epistemology.

Thus, the tradition of the ancient ritual initiation was 'de-mystified' in the process of teaching and learning, while the whole society was placed on a rational foundation of intellectual development taken place within sociological, not natural cosmic consciousness. An idea of 'generic man' - a convenient fiction for limitless expansion of power directed toward penetrating the minds of non-generic, socially specialized persons - was absent there as well. The pupil was functionally related to the teacher, while members of one *varna* - to all others. The idea of 'abstract', generic man is unthinkable for this consciousness; an attempt to comprehend it would lead to the infinity of non-intentionality and thus a mission of knowledge could not be fulfilled. Sociological determination of Indian culture is reflected in its finite character. Certainly, representatives of other cultures, with their principles of egalitarianism, cannot refrain from value judgments while characterizing the social results of their rational organization of methodological consciousness; Indian culture, however, is still well protected, because results achieved there look perfect from the position of the *sociology of knowledge*. Through rationalization of its own tradition, Indian culture was able to grasp a principle of *freedom* that liberated it from subordination to a principle of power. This was precisely what made its tradition eschatological: it [culture] would rather die than change itself [. . .]

EDITORIAL NOTES

(1) Otto, R. *Idea of the Holy. An Inquiry Into the Non-Rational Factor and Its Relation to the Rational*. London, 1950.

(2) A very similar idea - of a surpassing, by logic, things of the world - was expressed by Zilberman in his unpublished text 'On Sociological Prerequisites of the Emergence of Indian Logic', where he discussed a correlation of historical and sociological approaches to an analysis of thinking: "What should be the final conditions and foundation for a-chronical [a-temporal], i.e., structural correlation of different phenomena of thinking when a particular principle of historical development of culture is applied? Only after answering this question can we show that analogous situations may appear - situations, which, in fact, set the same functional positions for different mental identifications - because thinking operates through certain systems of actions, on different stages of civilization, within various cultures and forms of human activity. Problems encountered by structuralism that are connected with such a reasoning, are quite obvious. If we reduce all the variety of the phenomena of culture and all historical situations to a structure of a group, any explanation of the same phenomenon will acquire functional equivalents. The question then is, where is the guarantee, that this line is not endless? A peculiarity of correlation of history and historical consciousness is such, however, that we cannot stretch this line into infinity: the very nature of material we are dealing with, limits our activity structurally and contentually. It is obvious that by accepting these limitations, we take a position of formalism. In order to minimize a damage to a historical situation, an operative system has to be introduced. It is certainly impossible to know in advance, because of peculiarities of this system, which variants should be eliminated; still, some limited results can be achieved in this direction. The very material we are dealing with, a closed universe of tradition can prompt an operative system in our case. Everything that is admitted as existent in a particular situation, is created by tradition, as well as everything that can be extracted from it, is extracted as a result of a certain relation to tradition. Types of relation are imposed

by group necessities, i.e., one more time we actualize history in notions of group characteristics. Thus, through a series of steps we discover a necessity to show how the idea of a finite universe of tradition is linked to the very possibility of logical theory. As applied to history it means that since an existence of humankind is an real [objective] process, only few invariants can be at play. The majority of others invariants, if placed into a context of human history, present themselves as unacceptable conditions. This idea is a foundation of the structural morphology, which [morphology] can be defined as 'phenomenological realism'. Studying history makes sense only because its possibilities are limited; that is, if history and Providence are the same. Here it seems to be quite appropriate to remember a situation that presents itself in the Hegelian logic. Hegel was puzzled by a relationship between logic, philosophy, and history. It appears that, on the one hand, logic is a condition of the analysis of the philosophy of history, while logic is set to be unchangeable; yet, on the other hand, the very logic is analyzed in its development. An analysis of the philosophy of history, as a matter of fact, has to give an idea about logic itself. But a foundation of this analysis ought to be created by logical principles. That is why, after Hegel undertook the analysis of philosophy and history, neither logic, nor its understanding was changed in his opinion. However, a closed cultural universe of tradition can be analyzed by means of a model of interrelations of logic and philosophy in which they are mutually change. This analysis comprises the major motive of Indian philosophical thought; it reveals itself the most vividly in the philosophy of Shankara, who envisaged the possibility of viewing his system not only from inside, but from outside. Within a strict logical and inner approach, this task is formulated as an analysis of interrelations between the world of objects, language, and thinking, whereas a closed universe is represented as the identification of these items with each other by means of elimination of a proper sense of one of them (a consecutive rationalization of language and world of objective relations). That is why India presented, in fact, a much stronger 'logical' case than the Hegelian system: not 'panlogism', but 'panenlogism' became a leitmotif of consciousness there; 'panenlogism' as an idea that objects of the world are not only identical to logic, but are surpassed by it. That is, it was reputed that the objective world is somehow less than logic." (Zilberman. On Sociological Prerequisites of the Emergence of Indian Logic. Zilberman Archive. 1.7.5., pp. 14-16) Continuation of this passage throws a slightly different light on the problem of the correlation of philosophy and logic. Although this reasoning is in line with what Zilberman defended in his Ph.D. thesis, new important details are introduced here, details that make this passage worth a further quotation: ". . . within an outer, sociological view (for Shankara it meant: to look at God - the object of religion -as at phenomenon), which links logic to the existence of a social group, a situation is changed and an active relation to the world is demonstrated now by philosophy, not by logic. Philosophy appears to be the result of a spontaneous development of consciousness; it tries to open a logical cosmos, to surpass its own group properties, while logic acts as a phenomenon of an opposite kind, namely as a means of active traditionalization. For instance, when Buddhists on the basis of their analysis of religious and life experience, destroyed an established psychotechnical terminology and practice, it was certainly a philosophical process; its result, however, acquired logical forms. Another revealing situation is where logic gives an impetus to development of philosophy. But this happens rather on negative side, namely, when at certain stages of evolution of thinking philosophy has chosen to ignore logic. However, from a logical point of view, this fact invariably assists traditionalization and a closure of a 'remaining' universe." (Ibid., pp.17-18)

(3) Matilal, B.K. *Epistemology, Logic, and Grammar In Indian Philosophical Analysis*. The Hague. 1971.

(4) Bochenski, I.M. *Formale Logik*. München, 1955.

(5) Basham, A.L. *The Wonder That Was India*. London, 1956.

(6) Sastri, G. *The Philosophy of Word and Meaning*. Calcutta. Sanskrit College, 1959, pp.135-140.

(7) Annambhatta. *Tarka-Saṁgrana*. Poona. The Bhahdarkar Oriental Research Institute, 1930.

(8) Datta, D.M. 'Philosophy and Culture, East and West'. In: Moore, Ch. A. (ed.) *The Indian Mind*. Honolulu, 1964, p.751.

(9) Spratta, Ph. *Hindu Culture and Personality*. Bombay, 1966.

(10) "According to our opinion, [this presupposed] failure of the book of E.Erikson on Gandhi (417), as compared to his work on Luther (418)".

(11) Erikson, E.H. *The Young Luther*. N.Y., 1969.

(12) *The Book of Discipline (Vinaya-Piṭaka)*. P.I., (Sattavibhanga). J.B.Horner, Oxford University Press, London, 1938.

(13) Makovelskij, A. *Dosocratiki*. Kazan, 1914, Ch.I, s.66.

(14) Matilal, B.K. *The Navya-Nyāya. Doctrine of Negation*. Cambridge, 1968.

(15) Makovelskij, A. Op. Cit., Ch.14.

(16) Matilal, B.K. *The Navya-Nyāya*, p.69.

(17) Deutsch, E. *Advaita-Vedānta: A Philosophical Reconstructions*. Honolulu, 1969, pp.27-33.

(18) Chatterjce, S.X. *The Nyāya Theory of Knowledge: A Critical Study of Some Problems of Logic and Metaphysics*. Calcutta, 1950.

(19) Megasphen. *Fragments*. 41.

(20) Scweitzer, A. [left blank by Zilberman – ed.].

(21) Chatterjce, S.X., Op. cit.

(22) Ishwaran, K. *Tradition and Economy in Village India*. N.Y., 1966.

(23) Narajan, D. *Hindu Character*. Bombay, 1957.

(24) *The Book of Discipline*, Op. Cit.

(25) Lacy, C. *The Conscience of India. Moral Tradition in the Modern World*. N.Y., 1965.

(26) Shah, A.B. *Tradition and Modernity in India*. N.Y., 1965; Madan, G.H. *Indian Social Problems*. Bombay, 1966; Mamoria, G. *Social Problems and Social Disorganization in India*. Allahabad, 1960; Mukerji, N. *The Sociologist and Social Change in India Today*. New Delhi, 1965; Thritva, N.V. *National Integration*. Delhi, 1964.

(27) *History and Philosophy of Social Work in India*. Bombay, 1961; Dumont, L., Pocock, D.F. *Contributions to Indian Sociology*. 1967, V.I; Ishwaran, K. Op. Cit.; Sircar , D.C. *Studies in the Society and Administration of Ancient and Medieval India*. Calcutta, 1967.

(28) Hiriyanna, M. Philosophy of Values. In: *The Cultural Heritage of India*. Calcutta, 1933.

(29) Eliade, M. *Patanjala et le Yoga*. Paris, 1962.

(30) Rolland, R. *La vie de Ramakrishna*. Paris, 1929.

(31) Mukerji, N. *Standing at the Crossroads. An Analytical Approach to the Basic Problems of Psychological Integration*. Bombay, 1964.

(32) Keith, A.B. *Karma-Mīmāṃsā*. Calcutta, 1921.

(33) Satchitananda, K. *Word Order in Sanskrit and Universal Grammar*. 1967.

(34) Mukerji, N. Op. cit.

(35) Orenstein, H. The Structure of Hindu Caste Values. *Etymology,* Jan. 1965, vol.IV, N 1.

(36) This idea that is very important for understanding the entire concept of Zilberman is discussed also in his text 'On Sociological Prerequisites of the Emergence of Indian Logic': "These circumstances were reflected in a formula of a traditional transformation of culture, where meaningful relations are left hidden, whereas senses are transformed into norms." (Zilberman, D. On Sociological Prerequisites of the Emergence of Indian Logic, p.32)

REVELATION OF THE MECHANISM OF TRADITION IN A FORM OF GRAMMATICAL PARADIGMS OF INDIAN LOGIC

1. ON THE PROBLEMS OF THE CONTEMPORARY STAGE OF RESEARCH ON INDIAN LOGIC

Broadly speaking, any research on Indian logic can belong to one of two major groups.

The first one gathers scholarly works whose authors, having intuitively grasped a peculiar sense of Indian logic, strive for an interpretation of it as a system that ought to describe, adequately and quite correctly, that particular structure or field of activity which we will call, without further explanation, the 'traditional Indian Universe'. It implied that within 'its own' Universe, Indian logic has to resolve the same problems which any 'contemporary' formalized linguistic system resolves within a Universe usually described as 'objective (or empirically given) reality'. Such an approach compels us to demand from Indian logical systems the formal qualities of non-contradictoriness, completeness, and independence. But authors of the first group of researchers did not try to approach their problem in a systematic way. They did not consider Indian logic as a formalized linguistic system (these are mostly early European researchers; see, 1, 3, 4, 5, 7, 8, 9, 13, 14, 15, 17, 18, 19). Having recognized that the above-mentioned qualities were implicit in Indian logic, these authors claimed in fact that the 'traditional Indian Universe' possessed a special characteristic that permitted us to modalize its logical system, to maintain a sufficiency and adequacy of its description. In other words, [what appears to be eliminated] by such a claim in a quite paradoxical manner is the problematic that became crucial for demonstration by Kurt Gödel (see 24, VIII); therefore, the possibility of a formalized linguistic system that completely and unanimously corresponds to its Universe was admitted. It seems, however, that without the development of the concept of a 'universal logical grammar', there is no hope of proving or verifying such an assertion. The unavailability of that type of concept for pre-systematic research on Indian logic resulted in a certain skepticism (see 20) and, in particular, compelled doubt about the formal character of this logic (see 21,29).

The second group of researchers, admitting that the problematic of Indian logic still entails a lot of quite unclear [material] (see, 2-485, 517) rejected, in fact, an assumption of a specific quality of the ‘ traditional Indian Universe’ as non-formal and returned to its investigation as determined by the approaches and demands of a contemporary systematic logic (see 2, 6, 10, 11, 12, 13, 16). For these authors, a particular interest was stirred by the possibility of interpreting Indian material by means of European formal logic. (*) Attempts of this sort, undertaken by several researchers, were reduced to a utilization of symbolism and the means of our contemporary logic in order to interpret certain Indian logical systems. This successful adaptation serves as a confirmation of the true formal character of Indian logic, and should eliminate skepticism. At the same time, there were certain general assumptions about the formal character of Indian logic that were either formulated or intended by these authors. They can be reduced to the following ideas:

1. Logical symbolism appeared in the process of the transformation of ‘natural’ languages into formalized linguistic systems, and, at least in an early stage, was structurally dependent on an expressive means of these languages (first of all on their specific structure). Formalized linguistic systems sprung up together with escalated demands for accuracy and adequacy of expression. This also promoted a growing independence of logical formalism.
2. Any expression within a natural language can be understood by means of a certain model of the *meaning of expression*. If the expression possessed is of a logical nature, it can be transformed into a *logical formula*.
3. The above said is true with respect to Sanskrit, the principal language of Indian logic. Therefore, there are reasons to analyze Indian logic as a system formalized with regard to this language. Since Sanskrit is inaccessible to languages from which European logic arose, the properties of the latter can be transferred to the former.

Within attempts of interpretation based on such reasoning, a model of the European logic of the calculus was first promoted, and then a calculus of predicates [appeared] (see, 6, 16), “although sometimes not without hesitation” (16). According to its authors, a study allowed them to positively resolve a question about the existence of formal logic in India.

There are no serious objections against such positing a problem and methods of its resolution, when taken as a procedure, but they appear [if this positing is] analyzed in its essence. In this case a limited [narrow] formal approach impoverished an object of analysis and deprived it of its major interest. It can be stated that if the position of the authors of the first group made any systematic analysis of logical thinking in India impossible, the attitude of the second group made it simply unnecessary. Indian logical material is known very insufficiently, and it can be stated with a great deal of confidence that within such an approach

any increase in the number of known facts will add nothing or almost nothing to the sum of logical knowledge.

Meanwhile, European researchers, having initiated an analysis of the scanty material available for them, immediately noticed a certain peculiarity of Indian logic which made it acutely interesting. This peculiarity consisted of a consecutive striving towards intentionality. David Ingalls (6, Introduction) for instance, characterizes *Navya-Nyāya* as a realistic, intentional, and, at the same time, formal logic. The Buddhist logic of Dignaga may be interpreted as an intentional logic with a growing [developing] formalism (cf., 10, 11) Bochenski, in his review of the history of formal logic, concludes that in India ". . . we deal beyond any question with a formal logic. However, what is considered here [as logic] is a very peculiar *form* of logic, different from any logic known in the West, first and foremost, by a clearly expressed intensional tendency (while Western logic is predominantly extensional)". (2, p.517)

Perhaps the formal properties of a system, even as universal as logic, are not universal in [their] expression. They are determined by their relation to other systems, first of all, to formalized systems, which inevitably include non-formal elements and come out as the developed domains of the language of a contemporary science. This also follows from Gödel's demonstration. Formal properties of logic have a *sense* and are differentiated only in such domains. The systems of the formal language of logic, of formalized languages of concrete sciences and an 'empirical Universe' which unifies them, can be depicted as follows:

0 - sphere [level] of experience
1 - level of formalized languages of specific sciences
2 - level of formal logical language

Since any formalization of the language of science presupposes certain content elements necessary to construct its linguistic scheme, whereas an analysis of a formal structure of logic becomes impossible without a link to such schemes, it can be asked, how adequate is the reasoning of the authors of the second group, who studied the formal characteristics of Indian logic in general, without taking into account the structure and properties of special Indian systems of knowledge, which, as such, are to this or that extent equivalent to systems of contemporary European science? Is a conclusion about the formal characteristics of Indian logic the result of a schematic and arbitrary insertion into the 'Indian Universe', instead of its peculiar linguistic systems A′, B′, C′, D′. . . , of European linguistic systems A, B, C, D . . . ? Intentionality of Indian logic suggests that such a schematization is, at least, doubtful. One has to be reminded again of that 'vague presentiment' of pre-systematic researchers, who linked the formal characteristics of Indian logic to a paradoxical peculiar property of an 'Indian Universe'. However, it now becomes clear that a search for this 'peculiar property' has to be initiated from an analysis of the peculiarities of structure and functions of the special domains of Indian knowledge that could be taken as an equivalent of Western systems of science. In addition, it

seems obvious that certain parts of Indian knowledge play a specific role with respect to other parts, as in Western science, where such a role belongs to mathematics. For instance, speculative Buddhism has to be analyzed as an axiomatic formalized system of language to describe its 'own' Universe as a specifically organized activity. In that sense it seems to be quite equivalent to mathematics, which also represents a formalized system of language, and ought to describe its 'own' Universe as a certain organization of 'exact' knowledge. In that case Buddhist logic serves as a foundation of Buddhism in the same manner as mathematical logic [serves as] a foundation of mathematics. And only because of that, its formal properties, as compared to the formal characteristics of mathematical logic, have to be studied.

Mathematics is the most developed, but not the only system of organization of a scientific knowledge in the West. (**) There, as well as in India, we have, together with Buddhism, other organizing systems, formally developed to a different extent. In both cases, a structure of the Universe as (a unity of) systems of formal language can be represented as follows:

0 - sphere [level] of experience
1 - level of formalized languages of specific sciences
2 - level of formalized languages of 'general' [organizing] sciences
3 - level of general formal logical language

This scheme is an amplified version developed to investigate a structure of Indian logic; it allows for the establishment of its own formal character in a relationship between levels 2 and 3, as well as for the tracking down as to how this logic succeeds in keeping an intentional nature in a system of relations between levels 1-2-3. However, this scheme of a 'Universe' is not paradoxical, since what has to function within a formalized system of relation 0-1-2-3 appears to be a theorem of Gödel. The very ways of the formalization of extentional expressions can be equivalent to the modes of 'Gödelization'. (***) This means that a system of relations 0-1-2-3 can be investigated as a syntactical system, but not yet in a shape of 'universal logical grammar'.

Thus, particular tasks of the analysis of Indian logic appear to be problematic as far as their definition as a system of foundations of formalized organizing languages of the second ('mathematical') level (for instance, for Buddhism) is concerned. This means that the investigation of the general formal properties of such languages (such as non-contradictoriness, completeness, and independence) based on a system of *implicit* definitions (see, 22) comprising, in their totality a structure of the formal logical language of a certain domain, has to establish that these languages are similar to *Principia Mathematica*, and represent what could be called *Principia Buddhica*, *Principia Nayāyaica*, etc. Under such a systematic investigation, major logical structures of the Indian Universe in the form of elements of a hypothetical universal grammar, summarizing all known relations between levels 0-1-2-3 in this Universe, can be restored. What

should necessarily be demanded from such a 'grammar' is an *accuracy* and *adequacy* of description. Gödel's conclusion reminds us that this cannot be achieved within a unified formal system.

Indian authors themselves, however, as well as European 'intuitivists', were so persistent in their claims to the opposite, that, unwittingly, a metalogical desire arises for positing the question, "And what, if . . . ?" A task of this kind of investigation cannot be identified as logical according to its definition in a positivist sense. An analysis of Indian formal logic from a positivist point of view seems to be no more than a 'particular case' in attempts to formulate a 'universal formal logical language'. Certainly, the Gödel conclusion just mentioned made such attempts unnecessary, but in a new fashion it stimulated an interest in Indian logic, for instance, in light of a problem of 'universals', so important for logic. Bochenski in his review (see 2) frequently expressed his astonishment in regard to the persistent digression of Indian logicists from a formulation of 'universal logical principle', which so often in the long history of Indian logic was so clearly visible. He held this against Indian logic. Meanwhile, it seems quite obvious that such a digression was made intentionally. Indeed, in their opinion, this was surprising to some unfortunate followers of a great creator of myths, Plato, who discovered this principle. These researchers, however, were not followers of his metalogical system of *myth-creation*.

Let us suppose that the 'Indian Universe' indeed possesses a peculiar property that allows us to construct a certain *absolute* system of knowledge (discussed in the above sense). In such a case Indian logic represents precisely that non-achievable, eternally achieving ideal, a 'useful myth', which stimulates the development of Western science. Reasons of a psychological sort suggest that Western logic can behold its extentional nature precisely to such a striving. If so, what should we consider as Indian intentionality in this case?

If we maintain that Indian logic indeed reached a harmonic ideal of combination of the design and the content structure of knowledge, it has to be admitted that we study Indian logic as if by 'moving backwards'. A revelation of the formal properties of any linguistic system depends on a principle of organization of the Universe described (by this system). But this principle cannot be exactly and adequately described within the same linguistic system: such is Gödel's conclusion. Cognition is just one form of activity, a particular type of organized activity. [It is important to note that] an individual can grasp only a mediated activity. A non-mediated Universe does not exist for him.

Perhaps there is a universal mechanism within the Indian Universe that brings its cognition and its creative activity to equivalency. This mechanism can be identified as *tradition*.

Problem: Indian logic is investigated in two situations:

1. 'Formal': as a foundation of formalized systems of organization of activity, i.e., as a 'universal grammar' for such systems;

2. 'Non-formal': as a function of social and cultural systems, which are supplementary with respect to each other and which create a mechanism of tradition; this mechanism is taken as a universal foundation for a variety of logical languages. In other words, we have two tasks, which can lead a researcher to different directions, namely: a) to demonstrate the social-cultural *sense* of Indian logic as a most general form of tradition; (b) to characterize its properties in the capacity of a standard (model) of traditional activity (or, what is the same, of a general organizing principle of the traditional Universe).

In light of the above, it becomes vitally important to undertake an analysis of the interaction of grammatical and logical forms of tradition. In order to conduct such a research, a traditional formalism of Indian thinking has to be analyzed first; this demands an investigation of Sanskrit grammar.

2. TRADITIONAL FORMALISM OF INDIAN THINKING

Ancient thinking in India, as everywhere, was not analytical, but analogical and was based on an initial generalization of the experience of traditional ritual. Analogy gradually developed from 'imitation'; i.e., from a constant reproduction of the same: from an activity which created and was used as paradigms in different domains of the traditional Universe. The latter means that cosmic processes and situations were utilized as formal models of activity, i.e., rules of a social-cultural mechanism of human activity were automatically projected onto the whole Universe, which transformed this Universe into a 'traditional' one. Mircea Eliade (34) identifies such rules with 'archetypes' and undertakes their general classification. It the beginning, any imitation was understood as identification of action with its prototype, i.e., analogy had no limits, was interpreted as identity. But gradually, with an expansion of activity and a complication of situations of behavior, as well as with a structural refinement of schemes of thinking, an assumption was taken that, in order to reproduce causal links (for which a ritual magic ought to serve), one had to rely not on a strict content (i.e., essentially equivalent), but on a formal identity: formal analogy. Thus, if within analytical thinking certain logical elements have been manipulated so that formal schemes are first constructed and only *then* compared with this or that specific (metalogical) content, in analogical thinking of the type described different correlations between paradigms (which, in fact, are interpreted as a certain intentional, implicit definition) and concrete cases of behavior (compared to systems of relations [combined] from such implicit definitions) have been established. In other words, paradigms contain ready-made content schemes, whereas formal analysis relates to a procedure of establishing certain relations in the shape of a concretely-solving task of behavior. Therefore, content appears to be 'inside' of formal logical structures and determines their

properties. Such a process is specific for Indian thinking and the entire history of Indian logic can be analyzed as a movement of this type of formalization. Bochenski (2) defines a highly developed Indian formal logic precisely as an analogical one (p.495 and further).

The very nature of ritual magic and its function in a traditional society compelled us to pay special attention to an accuracy of realization of the formal part of ritual and presupposed a certain analysis of the implementation of coincidence or its [implementation's] extent. The importance of conformity (i.e., a preservation of structure of ritual paradigms, its necessity and sufficiency) is proclaimed by ancient Indian thinkers quite early. It is not really important who performs a ritual; what is essential is *how* it is performed. A reasoning of this sort and attempts to analyze corresponding situations literally saturate the *Upaniṣads*, which themselves can be interpreted as a specific speculative development of ritual Brahmanic texts. Let us illustrate this with an ancient and authoritative popular text *Chāndogya-Upaniṣad*, where a ritual song, performed by dogs, was described. A purpose of this description, as it seems, is to emphasize that what is important pragmatically is not content, but a formal part of a ritual (although a content motive has been kept in its title):

1. So, further (we will talk) about a dog's *udgitha*. Baka Dalbhya, who was also a Head Maytreya, went to study the Veda.
2. And here a white dog appeared in front of him. Other dogs gathered around it (and appealed): "Get us food by your singing, our benefactor, because we are hungry."
3. And this white dog answered them: "Gather around me tomorrow morning." Baka Dalhya, who was also a Head of Maytreya, decided to track it down.
4. And then, like priests, when they are going to sing the hymn *bahiṣpā vamana*, walk in file, grasping each other, - so, precisely in the same manner dogs started moving. Then they sat down and exclaimed: "Him!"
5. "*AUM* - we eat! *AUM* - we drink! *AUM* - Gods *Vatuna*, *Pradjapati*, and *Savitar* brought food here sometimes. O master of food, bring it here, bring. *AUM*!"

(Quot. (27., *Chāndogya-Upaniṣad*, 1.13.2, pp.357-358)) ([****])

It is no accident that such a clear demonstration of the formal significance of ritual and its substituting irrelevancy was given to the Brahman, who was about to start studying the *Veda*: this is the first lesson in methodology.

Indeed, in analyzing Vedic tradition, it is not difficult to realize that the significance of any content meaningness of paradigms was gradually disappearing, while formal elements became more and more important. If the first *samhita* was assembled from predominantly contentual hymns addressed to Vedic Gods then, by accumulating a synthetic experience of ancient knowledge, the following *samhitas* considered the same hymns as certain patterns [models], as objects

of analysis, or as criteria for correlation. *Sāma Veda* is a configuration of a musical form of *Ṛg Veda*, whereas *Yajur Veda* is its sacral projection, *Atharva Veda* [is] a magical [projection]. In other words, [we have here] a different combination of content-formal 'types'. This tendency culminated in 'Brahmans'. [We can conclude], therefore, that a form required a totally independent reality, which later became a source of a particular philosophical research in *Mīmāṃsā*. (*****)

We can spot the development of formalism in ancient Indian tradition and trace its realization as well. This is very important for our analysis. In complete accordance with the development of formal structures, a necessity to preserve and to translate them as models indispensable to any 'organization of context' became gradually more and more important. This was first undertaken in oral tradition. A large number of formally-used context-paradigms had to be managed and regulated at rather early stages, that seemed to be possible by linguistic analysis, as well as by investigation of [their] structures, and the relationship between [their] parts. An urgent need in logic as an instrument of analysis of truthfulness (correspondence) and in methodology of knowledge (for instance, for the classification of the standards of activity) became quite obvious. Thus, the main source of Indian logic appears to be the methodology of tradition, with respect to which methodology of discussion clearly has a subordinate significance (cf., however, 2, 28). A correlation of these factors seems to be different when the process of the creation of ancient Greek logic is concerned. Although a role for tradition was quite significant there too, its analysis cannot be as systematic and complete as in the Indian case (cf., 2).

As the result of this initial classification of traditional activity in India, a number of specialized 'vedologies', closely linked to the *Veda* itself (*vidyā* - 'vedology', which can be opposed to a later *jñāna*-'knowledge', and *sāṣtra*-'scientific discipline'), appeared. For instance, in *Chāndogya-Upaniṣad* (27. YII. 1,5), after the *Veda* was mentioned, the following 'vedologies' as 'parts of the *Veda*' ('*Vedanga*') have been enumerated:

1. *Itihāsa-purāṇa*: 'history' (exposition of events and legends);
2. *Vedanam-veda*: 'science of vedology' (analysis of structure of the *Veda*);
3. *Pitryā*: 'about ancestors' (mythology of a tradition of behavior);
4. *Rāśi*: 'about calculus' ('mathematics');
5. *Daiva*: 'about cosmic' (possibly, about cosmic models of activity determined by tradition);
6. *Nidhi*: 'chronology';
7. *Vākovākya*: 'statements about statements' ('logic of language');
8. *Ekayānta*: 'about motives of behavior' ('ethics and politics');
9. *Devavidya*: 'godology' ['science about Gods'] (general mythology and cosmology);
10. *Brahmavidya*: 'Brahmanology' (perhaps, a procedure of 'ritual identification' with a prototype);

11. *Bhūtavidya*: 'demonology' (more precisely, 'psychology', in ancient Greek interpretation);
12. *Kṣātravidyà*: 'military art';
13. *Nakṣatravidya*: 'science about heavenly bodies';
14. *Sarpadevadjanavidya*: 'doctrine on generation of living being'.

We can only guess about the content of all these 'vedologies'. Most probably, they were entirely paradigmatic systems. However, the enumeration just listed does not give one the impression that foundations of this classification create any type of unity. The composition of 'vedologies' has been changed in the course of time, but their paradigmatic nature was invariably preserved. In some cases, notwithstanding, an extensive-formal development of structures dominated, since their [structure's] dynamic related to a domain of positive, mythological and philosophical knowledge. Thus, special *sastras*, *purānas*, and *sūtras* were singled out. Other parts of ancient knowledge, more closely connected to a logical-grammatical investigation of its material, paid significant attention to an intensive-formal analysis. In the period of the middle *Upaniṣads* a new, 6-member's composition of *Vedāṅga* was formed (see, 30):

1. *Śikṣā*: phonetics (authorship is ascribed to Panini);
2. *Nirukta*: etymology (authorship is ascribed to Yaska);
3. *Chāndas*: metrics (by Pingala);
4. *Aṣṭadhya*: grammar (by Panini);
5. *Jyotiṣa*: cosmology, or 'ontological grammar' (by Lagadhi-cf. "Megale Syntax" by Ptolemy);
6. *Aṣvalayanaṣrauta*: ritualistic.

A tendency to a more intense systematization and formalization of tradition is quite obvious. Thus, when a history of the formal analysis of tradition in India is concerned, one can point out a line from the *vedinamvidya* (i.e., a doctrine on the structure of the *Veda*) through the *vākovākya* (i.e., a doctrine of structure of Vedic language), to rules and methodology of discussion *vatanavidya* (see 19). First attempts of a purely logical analysis as presented within Gautama's *sūtra* seem to conclude this line.

3. THE INFLUENCE OF GRAMMATICAL FORMS OF SANSKRIT TO A METHOD OF INDIAN LOGIC

Analyzing a complicated logical construction of *Navya-'Nyāya*, Ingalls notes in his book (6) that operations undertaken by logicians of this school would be impossible in any other natural language except Sanskrit. Indeed, Sanskrit is notable for its absolutely unique combinational resources (that is why, by the

way, any accurate translation of logical literature from this language can be undertaken only by a means of mathematical logic). But these resources are not some 'innate abilities'; here in fact we deal with an artificial language. In its literal and more exact sense [the word] 'Sanskrit' can be translated as 'constructed'. An ancient Indo-European language that became a foundation for Sanskrit apparently differed not very significantly from other natural languages of this family. We can judge about it at least, by comparing classical Sanskrit with the Vedic language. The Vedic language allows much more freedom to manipulate grammatical elements; its purely phonetic and morphologic means appear to be closely connected to a syntax structure and are lifted, in fact, to a rank of syntactical means. As an example, one can cite here the separation of the prefix and root [of a word] which allows for the quite distant placing of both of them; the peculiar syntax functions of the accent [emphasis]; and so on. However, it seems impossible to consider this as something absolutely unique and never repeated in this or that part in, say, ancient Greek or German languages. In the Vedic language there were prerequisites for the utilization of logical-grammatical functions only in structural form. Later on they became a subject of specific linguistic analysis, generalization, verification, selection, and specialization. Also quite significant was that this project was realized (at least, in its major part) in a period immediately preceding the creation of a systematic logic in India, well before 'systematic' philosophical schools.

In this line of succession an important position belongs to the grammar of Panini. Panini presumably lived in 5th-4th centuries B.C., which means that his activity immediately preceded systematic logical literature, both Buddhist and orthodox. It was precisely his grammatical works which played a decisive role in the very formation of Sanskrit. It is quite obvious that their analysis may provide us with important information about the logical-grammatical problematic and the utilization of grammatical means in logic.

Panini's rules and means for the analysis and interpretation of grammatical structure determined the entire logical-grammatical tradition in regard to both form and content. Panini undertook a number of ways to express different grammatical relations and initiated their 'logical processing'. Logical-grammatical operations and categories were divided and coordinated in such a way that they could later be used as instruments of logical analysis - up to a quasi-symbolic 'cliché' [developed] by later *Nayāyaikas* (see, 6). Thus, a peculiar logical-grammatical structure was, in fact, filled with 'inner' logical problems.

Logical relations in Sanskrit can be expressed with the help of phonetic, morphologic, and syntactic means of grammar, but not all of them equally fit this explanation.

What is important when phonetic means are concerned are the rules of 'lifting' a vowel.

Rules of 'lifting' (which means, in fact, a change of tonality and duration of phonation) are usually illustrated by the following schemes:

lower (0) level (a) i u r l
1 level (*guṇa*) a e o ar al
2 level (*vriddhi*) a ai au ar al

A transition to a higher level corresponds to a higher level of logical abstraction. Since nominal notions in Sanskrit in the majority of cases are formed from verbal notions (to use the terminology of European grammar), usually the lowest (0) level corresponds to a level of action, interpreted in traditional thinking as a certain immediate functional paradigm of ritual; the first level of lifting [corresponds] to a level of a produced 'name' of an actor, an object, or result of action, as a qualitatively-realized appearance (*guṇa*) and formal fixation; the second level finally [corresponds] to a level of the essential property of an object on the first level-property which determines a specific character of action and its concrete attribution in the shape of superstructure or grafting over the previous level of realization [form of *'vriddhi'*]. For instance:

0 : *dic* - 'to show a direction'
1 : *deca* - 'direction, domain, relative position'
2 : *daicika* - 'spatial'

Quite fascinating is that this 'phonetic' of abstraction, possibly the most ancient one, was preserved later as a major logical paradigm. The very structure of Indian intentional logic gives an example of the succession of the ancient mythological three-level's structure mediated through a grammatical form.

It is interesting to compare this with a development of formal logic in the West. The procedure of 'lifting' just mentioned is very important to elucidate the logical structure of a system of a speech's parts. It is known that in Sanskrit, as well as in other 'traditional' languages (for example, in Chinese), a division of the parts of speech in interpretation by European science is quite superficial. This kind of division goes back to logical-grammatical opinions [views] of the Stoic school (see, 20, 29) and is directly linked to a logic of utterance developed there. Thus, a grammatical part of speech is the equivalent to a term of utterance. In the history of European grammar, a logical form was superimposed on a purely linguistic domain. What happened in India, however, was an opposite influence. The very form of utterance appeared to be quite alien to Indian logic. Here the so-called 'knowledges' (*jñāna*), which are structurally more closed to 'notions' of European logic, are an object of operation. However, the latter [European logic] lacks any developed mechanism of logical operations with notions. (see, 23)

Quite remarkable is that a three-level's scheme of 'lifting' of vowels corresponds to a general structure of European 'concrete sciences' which are a real [true] equivalent of Indian logical 'knowledges'. Indeed, in any system of science one can easily notice a necessity to operate with 'empirical data' (0-level), with 'scientific facts' (1-level), and with 'formal facts' (2-level). This principle,

which goes back to the mythological opinions of Plato, was finally maintained in European empirical science by Galileo. However, a logical model of a body of science is reproduced here in a form of a system of utterances, since there is no special means to represent science as a unified complex idea [notion]-an idea, which, in fact, represents science. Indian logic possesses such a means (in its own limits), and that is why it can be regarded as fully intentional: formal levels of logical abstraction (as if) correspond to levels (degrees) of reality. This peculiarity is typical to many Indian logical-philosophical systems, but what is important for us to show now is that all these forms go back to a linguistic paradigm, as a reflection of a structure of a traditional activity, traditional thinking and a traditional Universe. Problems of 'logical semantics' in Indian systematic thinking have been never posed.

Indian grammarians and logicians strive for a strict maintenance of the three-level scheme, but since within natural language a phonetic principle does not act with a required success and generality, it was changed to another principle, namely, to a morphological one.

Morphological means of logic include the logical function of case constructions and the utilization of a suffix in order to express logical relations. A sort of general investigation of the first question [logical function of case constructions] was undertaken in (24); [an analysis of the same topic] with regard to Indian logic of *Navya-Nyāya* (although in the very preliminary form problem) [was undertaken] by Ingalls (6). This topic certainly needs further analysis, since such a way [of argumentation] appeared to be wide-spread in Indian logic.

As for a means of suffix (as it was also demonstrated by Ingalls (6)), it became a foundation of the expressive system of *Navya-Nyāya* and was utilized, quite effectively, precisely to index levels of logical abstraction. Thus, a scheme, showing why phonetic 'lifting' appeared to be incomplete, was drafted.

The rules of operation with the multi-level 'knowledges' are determined, finally, by purely syntactic means, which appear to be a major instrument, as well as an object of logical analysis.

We will analyze, for illustration, the main rules of 'nominal' word-construction. This seems to be quite instructive with regard to logic, if we remember that Indian 'knowledges', due to their very structure are closed to complex nominal ideas [notions], which in a shape of certain formulation-definitions, or deductions from notions, then take part in logical operations of a more complicated order. Complex 'knowledges' can be analyzed from two points of view: (a) as constructive content elements, which participate in logical operations as indivisible elements (in this case, they do not differ, in fact, from simple notions and can have a sense of logical variables); (b) in the shape of formal paradigms, which structurally correspond to the order of words in a sentence (when this order is fixed in a certain way for the expression of the succession of logical deployment). Since complex notions are included as compound elements in structured systems and in some cases can be equivalent them, we have to start with an analysis of these notions.

4. RULES OF NOMINAL WORD-CONSTRUCTION IN SANSKRIT AND THEIR LOGICAL CORRELATES

Let us review some general rules of nominal word-construction in Sanskrit - rules which perform as operations with notions:

1. Simple nouns can be gathered into complex ones, complex nouns into other complex ones and so on, without any limitation of volume [of composition];
2. Any roots can be parts of a composition, including meaningful elements-prepositions and prefixes, conjunctions, etc. (and then they are nominalized). Such is a peculiarity of a 'technical' Sanskrit as a language of logic.
3. Three categories of syntax operations correspond to three types of logical operations distinguished there.
4. A logical dependency is pointed out by formal transformations of combined words.
5. Phonetic, morphologic, and syntactic means can be utilized as formal means of a word-construction, but sense of these formal means is different when each of three categories [of means] is concerned.
6. Categories of a word-construction seem to be developed historically. Supposedly, a reconsideration of a logic of things influenced a transformation of these operations.

A. *The connecting compound nouns of 'dvam'dvam's' type* express links (*'sambhandha'*) of their parts or their conjunctions (*samāhara*) in one group or in a unified notion.

In the Vedic language, the notion of a real object was conceived according to the logic of separate things (see 35). This is why the elements of syntax were interpreted as significantly independent. This was reflected in the external properties of the operation of 'samahara'. As a matter of fact, its members were involved in mutually monosemantic correspondence (*'dvam'dvam'*); however, *each* of its accomplices became at the same time a bearer of formal properties of combination; [this is] because traditional thinking can represent objects only in a shape of significantly separate things. Relations between things were 'absorbed' by things. Under a twinned conjunction both components acquired an ending of doubled number and this served as a formal indication of conjunction. In classical Sanskrit this mode of a word-composition was preserved, but as an out-dated one and was used only to compose names of Gods (since each of them was interpreted as possessing its own individuality, but with a partial absorption of the properties-attributes of its partner). For instance:

Mitraḥ ca varunaḥ ca iti mitravarunau
Mitra + *Varuna* = (biner) *Mitra-Varuna*

This scheme degenerated because it is difficult to keep up for the more complicated cases (e.g., plural correspondence). It was partly preserved only for

some ontologically important binaries, each member of which, as before, was conceived as significantly individual (since this, as it seems, strengthened a structure of biner). The first member of such a conjunction, as a rule, carried an ending of a singular number; the second one [carried an ending] of a doubled one. That is an external indication of conjunction, singled out as a notion, was thus formed. For example:

Dyauḥ ca pṛthvī ca iti dyavapṛthivyau
Heaven + Earth = cosmos

The following way of thinking can be correlated with the cited scheme. On the one hand, Gods were interpreted as purely individual objects; on the other, as a means to symbolize individual knowledge. But a 'non-associated' individuality in thinking according to paradigms is equivalent to non-existence. This is why the combining of two Gods' names was not an extraction of their likeness (i.e., of some common properties, inherent to both of them and creating a foundation for abstraction), but a complete imitation. In this way, a combination of 'two *Mitras*' or 'two *Varunas*' was created. Thus, a demand of typological thinking was observed, individuality of elements preserved (although duplicated), and a conjunction of two content types achieved. However, a formal way of composition does not presuppose the possibility of analysis. Its function is to point out to a fact of composition of a compound notion, which identifies the very combination of properties of components (a peculiar 'double inner reflection'). Together with development of a conception of 'association of things' the very fact of composition as something definitely external to a group was conceived. It was manifested in a loss of endings by components [of a combination] and in a placing at the end of a group a general formalized indication of combination, an ending of a plural (or doubled) number. Such an operation, analyzed from a meaningful point of view, is quite close to the operation of a logical composition. For example:

Brahmanaḥ ca kṣatriyaḥ ca vaiśyaḥ ca sūdraḥ ca iti
brahman + kṣatrij + vaiśya + śudra =
= brahmanakṣatriyavaiś yaśudraḥ
= brahman^kṣatrij^vaiśhya^śudra
(class of four *varṇas*)

This group is taken as a *multitude*: a number of the members *'samahara'* can be increased voluntarily, and can also be divided into subquantities, described from a position of their inner relations and relations to the entire multitude. Some of the members can be extracted, counterpoised to others (in fact, this is a disjunction), etc. This method is very close to the operation of logical composition. In addition, this is an important stage in forming a concept of a word as a noun of some general class, distinct from a previous understanding about it to the extent of a noun of an individual thing being distinct as a thing itself.

However, to format a class according to this interpretation is possible only in a purely extentional way. If to understand each of the components as a paradigm, we have here only a class of coordination of paradigms. A principle of composition of multitude can be only a coincidence of certain properties (class-formation according to a content), but this principle is not evident when the very form of this composition is concerned.

The next stage in developing the category *samāhara* was understanding of the result of addition as something different from a composition of components. A formal indication of this operation was a combination of multiple elements which lose their individual endings under such a procedure and cannot be taken as independent [separate] things anymore. This was expressed by placing a compound word into a neuter gender of a singular number. What was kept under such a transition was the freedom of inner transformations; this permits us to characterize this type of word-composition as a logical multiplication. [. . .]

Three following stages of the development of the category *samāhara* can be corresponded to a transition of notions from individual to peculiar and then to general. In the third variety, *samāhara* is interpreted as a general notion about some thing as a 'place' of other things. In that way, one of the major indications of the logic of *Nyāya* has been formed. What becomes accomplished by the third variety of the word-composition *samāhara* is a process of forming a class as an extentional aggregate of elements, whose properties, however, can be revealed only within an externally posited field of meanings. If the name of such a class means a complex of properties in some system of behavior, it is understood as a quantitatively-non-divisible entity, a model to compare various particular situations as subquantities. Without such positing a semiotic field of meanings a structure of compound notion is reduced to a form of its expression. Perhaps, this can be seen as a source of the methodological difficulties of early *Nyāya*, which in all stages (of its development) was still a 'logic of things'. According to *Nyāya*, *correct* knowledge is that in composition of which the elements really compatible in concrete semiotic domains (systems of ethics, cosmology, and so on) are present [utilized], i.e., a proof of compatibility has to go down to an immediate perception (see, 14, 15). According to a logic of things, things also belong to a composition of a compound notion. Thus it is not appropriate to speak directly about a multi-level analysis. Any numerical characteristic given by the composition *samāhara*, is far from being sufficient for an analysis of a compound notion. That is why logical conclusions from notions of this type appear to be formally impossible.

It is quite easy to mark in a logical-ontological system of categories of early *Nyāya-Vaiśeṣikā* its grammatical prototype, the just analyzed compositional operation of *samāhara*. Initial notions here are *'dharma'* and *'dharmin'*. *'Dharma'* in general means 'property', but for *Nayāyaika* it is equivalent to a 'thing' [as] an element of composition. *'Dharmin'* is a carrier of 'property'; [this] corresponds to a compound notion. The result of composition, as new knowledge, is mediated by

the first category *'dravya'* ('essence'), separate properties of which, not independent anymore, but connected, correspond to the second categorỳ *guṇa* ('qualitative component'). The very operation of composition is mediated by the category *karman* ('action'). This is the first cycle of synthesis. Since conjunction has already been undertaken and thus new knowledge therefore obtained, an external principle is introduced: formula *'dharma-dharmi-bhida'* (i.e., a differentiation of properties and a carrier of these properties). With such a move, an analysis, this time not of ordinary elements, but types of their relations to a compound notion, is presupposed. Three more categories are introduced for this [analysis]: *viśeṣa* ('solitude'), when *guṇas* co-participate in *'dravya'* simply by introduction of their specific properties (this is analogical to the second type of word-composition *samā hara*); and, finally, a fact of establishing a type of relation between the categories *'dravya'* and *guṇa* is mediated by the category *samāvaya* ('inherentness'). The first type of *samāhara* as rudimentary, is not reflected within the system of categories. Later, in order to implement more complicated logical operations, one more category, 'non-beingness', has been introduced.

Thus, a structure of deductive operation in the logic of *Nyāyais* appears to be quite accurate and sufficient to reproduce a paradigm of word-composition with a subsequent establishment of relations between an entity and its elements by means of adding or subtracting the categories as the same elements in composition of a complex word.

SCHEME OF LOGICAL CATEGORIES OF EARLY *NYĀYA*

dharma

dharmin = *dravya* == *karman* == *guṇa* – *samāvaya* – *viśeṣa*

abhava *samānya*

B. *Determining compound nouns of the type karmadharaya-tatpuruṣa* are formed with a certain modification in the meaning of structure's elements (*vicāra*), so, a compound notion performs [represents] as their relation. This relation is fixed positionally. There are two sorts of composite elements of such a type: attributive (*'karmadharaya'*) and correlative (*tatpuruṣa*).

Moreover, compound nouns of the first sort more often (although, not necessarily) appear to be two-dimensional, attributive elements, which determine how the main (elements) are subordinated, and which possess a duality of transpositivity. Each attributive element can be directly connected to a main notion; these pairs can then be joined once again according to the principle *samāhara*. Compound words *'karmadharaya'* determine the main notion either in a form of its negation, or by means of its attributive individualization (by prepositions, numerals, adjectives, adverbs, comparisons, etc.). [. . .]

In all such cases a determining element loses a nominal ending (if it had it), while a direction is indicated by the order of words.

In correlative compound nouns [of] *tatpuruṣa* [‘s type] one element (usually a preceding one) is in a position of indirect case to another (subsequent) [element]. [. . .]

For such structures a deduction from notions is quite possible; we can always realize a genetic dependence of a compound word upon a major notion [elements] in it. Panini cites a quite complicated classification of ranges of *tatpuruṣa*. However we do not have an information about its utilization in logic.

Let us also point out proximity of this type of word-composition to major principles of the philosophy of *Saṁkhyā*. Indeed, a principle of modification (*vicāra*) means a significant preservation of initial meaning in a complex, a preservation, which is determined by different relations indispensable to a description of the states of general ‘substratum’. These relations remain peculiar ways to reveal a certain meaningful reality, which is being produced by them, just as separate *‘tattvas’* (‘modes’) in the theory of *Saṁkhyā* are only modifications of initial *`prakṛtì*. In grammatical structures of *‘tatpuruṣa-karmadharaya’s* type the whole hierarchy of levels of reality with preservation of transitiveness of relations becomes possible: an initial element, in contradistinction to the word-composition *samāhara*, acts as if it emanates properties, i.e., generates content of a compound word in a shape of relations which determine it.

Since the epistemology of *Saṁkhyā* is manifestly psychological, to detach from its categories purely logical relations seems to be a risky business. To illustrate a structural-grammatical foundation of a theory of succession in *Saṁkhyā* let’s be confined to an analysis of the first line of *Saṁkhyā-Kārikā* by Ishvarakriṣna (36):

T Dj H
Tatpuruṣa *karmadharaya* *karmadharaya*
Tatpuruṣa *tatpuruṣa*
equivalent *tatpuruṣa* *karmadharaya*
equivalent to *tatpuruṣa*

This means:

“(Result) of affecting by a triple suffering (T) (is) a realization (Dj), (which consist in an idea) of sufficient foundation to eliminate suffering (H).”

Psychological interpretation:

“Cognitive ability ensures a realization of suffering, cognition of a sufficient foundation [for elimination] and a way of elimination.”

Thus, in the first line of *Kārikā*, by a purely grammatical means, a goal and plan of the entire composition have been expressed: emancipation from suffering by means of logic. This is not something exceptional: *The Nyāya-Sūtra* contains the same thought at the very beginning. It is also interesting to compare this three-level formula with the known four-part formula by Buddha.

Three parts of the three-level formula were understood within the logic of Samkhya, as it seems, as three elements of deduction [syllogism]: 1) T - a ‘minor’

premise; 2) Dj - a 'medium' premise; 3) H - a 'major premise'. Indeed, T means something individual, psychologically describable, empirically given, aspectual; Dj-connection (i.e., *'lingem'* as it is evident from the text of *Kārikā*), combined both psychologically-individual (aspectual) and logically-general (gender) origins. [. . .] This *Saṁkhyā* construction does not have much in common with the usual forms of deduction accepted in Indian logic. Nevertheless, it can be pointed out that, its three-member's form is closed to initial logical schemes of 'triple deduction' by *Nayāyaikas* (see *The Nyāya-Sūtra*, 2, p.499) and *'trirupya'* by Dignaga (see, 2, p.511). Thus, according to 1,5 of *The Nyāya-Sūtra*, an inference (*anumāna*) is a triple following which corresponds to a prerequisite; i.e., is a psychologically mediated act of perception as described by *Saṁkhyā-Kārikā*, which also corresponds to a 'subsequent' (i.e., Dj) and is based on perception of likeness, i.e., H - *'hetu'*. As a psychological notion, it cannot be, according to Dignaga, a member of a formal inference. However, 'within' the context of *Saṁkhyā* this structure is utilized not only contentiously in each separate case, but also formally, i.e., serves to depict relations between 'neighboring' *'tattvas'* in a system's line of phenomenology of *Saṁkhyā*. However, this is done not 'logically', but precisely 'grammatically': a 'medium' member is included simultaneously into two different relations of the type *tattpuruṣa*, and the second one appears to be inverted (in a psychological sense it can be defined as 'reflection').

A broad utilization of morphological means can explain, it seems, why this logic has an obviously manifested 'non-subjective' nature (and this is a crucial distinction from a subject-predicate scheme of classical European logic). It can be viewed as amazing because of the well-known dualism of *Saṁkhyā*. However a subject (*puruṣa*) exists figuratively and remains indescribable, whereas in the capacity of its closest 'substitute' one can realize a copula-*lingam*, which in both constraining relations appears to play the same role, [namely that of] a generated idea (which is the most general modification of *`prakṛti*)[. . .] It is quite remarkable that precisely this 'logical subtlety' appears to be a sufficient foundation to emancipate a subject: he (she) does not belong anymore to a chain of succession, generated by suffering.

C. *Word-composition according to bahuvrihi's type* becomes the more unified and general one; it can include two preceding types. As a rule, *'bahuvrihi'* is identified by its context, but can be formally identified independently. This construction can be understood as a 'non-subjective predicative', equivalent to the entire sentence, but formally different [from this sentence]. A 'subject' of *'bahuvrihi'* represents a certain functional manifestation, a moment of activity, i.e., a particular case of connection of elementary ideas. This manifestation (or description) exhausts knowledge about a subject in this particular moment; its content is a content of subject; its structure [is] a form of subject. This will be marked by the word "here . . . " at the beginning of a description *'bahuvrihi'*.

Grammatically three types of *'bahuvrihi'* can be distinguished:

a) inherentness;
b) attribution;
c) relation.

Perhaps, *'bahuvrihi'* is to a certain extent a reconsideration of *tattpuruṣa-karmadharaya'*, and, structurally, these types [of word-composition] may not be distinguishable without a context.

To proceed from the above described, one can place *'bahuvrihi'* in correspondence with the major ontological and epistemological principle of Buddhist philosophy. In this case, a word's complexes become a semblance of the linguistic prototypes of Buddhist *'skandhas'*, a system's characteristics of activity of 'individuals' by means of [certain] typical elements; a change of such complex predicatives ensures a complete 'non-subjective' description of the entire process.

Let us also point out that a shape (a form) of parts of all-Indian 'syllogism' is precisely this form of *'bahuvrihi'*, not an analytic utterance. For example, a first premise of the known logical paradigm *pārvatodhṃavan* is equivalent to *'bahuvrihi'* - "(Here is) a smoking peak", but not to an expression: "A peak (is) smoking". This underlines a situational nature of [this] part of inherence on analogy.

5. GENERAL CONCLUSIONS

1. It seems important to emphasize a significance of the analysis of its own logical means created by Indian logic on a foundation of 'technical' Sanskrit. This analysis, in general, has to precede any attempt to interpret Indian logical realities by means of European logic.
2. It is very significant to realize the role of tradition in Indian thinking, which predominantly had an analogous nature. It was manifested, in particular, by a creation of paradigmatic means, first of all, for linguistic translation.
3. Grammatical paradigms, created in the early stages of the development of logic, in their turn, could serve as a source of new types of analysis. Since our goal was only a schematic description of this process, these correlations were significantly simplified and exposed in a first approximation.
4. The examples cited above show a presence of three major lines of tradition within ancient Indian logical thought, each of which is characterized by a special set of expressive means. Naturally, the borrowings most widely made were possible here, since these means were created on the basis of a unified linguistic substratum. It is also noteworthy that the essence of methods mentioned is equivalent to the major philosophical principles of corresponding systems (*Nyāya*, *Saṁkhyā*, and Buddhism), and, since a linguistic tradition preceded them, a version of paradigmatic translation appears to be quite possible.
5. The last circumstance, being a part of the traditional tendency significantly determined an intentional nature of Indian logic. Let us clarify this by using an interpretation of causality within these three philosophical schools. As a starting point, we will take a known Buddhist formula *'pratilya-samutpada'*, one of the most general (from the available logic

formulas of causality within classical Indian logic) and try to give its triple interpretation.

(a) According to *Nayāyikas*, this formula has to be the result of a word-composition *samāharà*:

pratilya + samutpada = 'pratilyasamutpadam'
'preceding' + 'appeared' = 'preceding' ^ 'appeared',

that in a usual terminology of *Nyāyàs* theory of causality /p.14/ looks like the following:

'preceding' + 'absence (*abhāva*) of appearing' = 'material cause (*dravya*)'
'appearing' == 'instrumental cause (*kāraṇa*)'
'existing-before' ^ 'appeared' + 'absence of appearing'
(*'pratityasamutpadam' + abhāva-kāraṇam*) - i.e., a structure of 'thing'

This should mean that a principle of causality is reduced to exposing a new structure as the result of the activity of combination: objective content of a notion is determined entirely by changes of its composition, [whereas] structure [appears to be] an indication of content. Such is the first type of Indian intensionality. Certainly, early Nayayaikas were not in a position to successfully overcome difficulties which are inevitable within such an interpretation of contentness. Causality as a certain type of activity of ideas still remained something external with regard to their [ideas'] structure. In spite of many witty attempts (as, for example, an interpretation by Djayanta of a content of a compound noun as an 'integral of weights of its components'), they appeared to be unable to create a well-balanced logical theory. Only a decisive introduction by Gaṅgeśa (p.6) of a detailed theory of definitions ensured progress in the logic of *Nyāya*.

(b) In the logic of *Saṁkhyā*, structural definitions were implied. In contradistinction to *Nayāyaikas*, *Saṁkhyā* considered the result as 'pre-existed' in a cause, i.e., [interpreted] the result as just a modification of a cause. That is why a formula of causality looks here as follows:

'prati' q *'ityam'* R (*'sam'* + *'ud'*) q *'padam'*,
where q means *'karmadharaya'*, R – *tattpuruṣa*.

That is, what is discussed here is an 'appearing of a formatted pre-existence', which is equivalent to the idea of 'pre-existence' of result in a cause. *'Tattvas'* are new formations (*'samutpada'* of *`prakṛtì*), and as such are determined by *prakṛti* in the *formula of causality* and pre-exist in it. This is why *'samutpada'* (i.e., a system of *'tattvas'*) appears to be the main element of a complex [organized according] to the *tattpuruṣas* type. An intensionality of logic of this type is an affirmation of the genetic dependence of this type of activity (or structure) from previous types.

(c) In Buddhist interpretation of this formula is a 'doctrine of independent origin' according to *'bahuvrihi''s* type; i.e., a claiming interconnection between

the ways of functioning according to a certain type and a form of 'individual realization' as an instance meaning of a certain function.

It is noteworthy that a structure of *'bahuvrihi'* can formally be interpreted in many different ways. Indeed, elements *'pratilya'* and *'samutpada'* can be understood, in their turn, either as *tattpuruṣa-karmadharaya* (let us conventually call this *Saṁkhyās* type), or as *'bahuvrihi'* ('Buddhist's type'). In that case we have four versions:

(SS)B - (here is) a 'forming of pre-existed'
(SB)B - (here is) 'formed of '(here is) pre-existing'
(BB)B - (here is) '(here is) formed a pre-existing'
(BS)B - (here is) '(here is) formed a pre-existing'

These formulas correspond quite obviously to four interpretations of the Buddhist theory of causality (cf., p.17); this also compels us to presuppose a possibility of a grammatical model. However, an external forming of such 'assertions' as *'bahuvrhi'* lets us maintain a unity of Buddhist logical position of 'functional' intensionality.

6. Each variety of logic with its specific means turns out to be acceptable in its specific domain of activity. However, some general requirements of tradition presuppose a necessity to create a logic of a higher rank. For Indian tradition logic of this type finally appeared to be *Navya-Nyāya*, which synthesized in its apparatus the logical and grammatical means of predecessors.

NOTES

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(*) The above said, of course, does not mean that authors of the first group were not involved in interpretation. But for them such a task had a secondary and subordinate meaning, and, most important, was not systematized. That is why their interpretations, in spite of a perfect knowledge of factual material, so often appeared to be erroneous (see, 4, 5, 14, 17, 17*, 19).

(**) For instance, as abstract system of theory of harmony. (see, 31, 32).

(***) It makes sense to initiate a search for analogical modes in Indian material. On anticipation of Gödel's method within a theory of harmony of Ptolemy, see, 31, Ch.XY.

(****) Translated into Russian by the author.

(*****) As an example of a 'tradition of methodology' a utilization of the notion *'skandha'* in early Buddhism can be mentioned. Incidentally, this notion wonderfully resembles an analytical notion of 'configurator' in (2).

THE TEACHING OF ŚAṄKARĀ ON INTUITION AND THE ORGANIZATION OF PHILOSOPHICAL TEXTS IN ORDER TO PERCEIVE THE TRANSCENDENTAL

1. Taken as a whole, philosophical thought of India exerted a much stronger influence upon culture and the rational organization of society in India than philosophical thinking did in Europe. It can be explained by their respective orientations towards reflecting upon different types of experience. Scientific knowledge as an object of systematic philosophy in Europe, from Descartes to Hegel, lacked an ability to ascertain anything higher than its second level. Philosophical reasoning remained here on two levels of organization: scientific research, and the language of science. Reflection of the third rank ('self-consciousness', in the terminology of Hegel) either remains 'empty', or becomes identical to a reflection of the first [rank]. It is possible to show that this bifurcation, inevitable when philosophical introspection of scientific knowledge is discussed, appears to be of crucial importance for all the further development of systematic philosophy and its social effectiveness in the West, in the sense that a first alternative of the third rank of reflection was realized only in a shape of a non-systematic 'philosophy of life', and existentialism, while the second [alternative], was transformed into a 'non-philosophical' positivism.

2. Any reflection upon a religious experience, which was inherent to a systematic philosophy in India, cannot be limited to these two levels. This can be explained by the fact that, if a success of a scientific experience depends upon speculative grounding of conditions necessary to reproduce causal links (that is, upon a level of objectification of a content of experience), a peculiarity of religious experience consists of an aspiration [of its subject] to preserve oneself in a subjective mode. Making ourselves an object of religious experience, we constantly have to clear a field of experience from those particles which we managed to transfer into a relation of objectivity of our reflection and [by this move] to transform them [these particles] into an object of a habitual (for instance, scientific) experience. An attainment of this goal should become a *theoretical* protection of the possibility to achieve religious experience as such.

3. Indian metaphysics was constantly preoccupied with a necessity to take into consideration the presence of two 'physics' which had to be overcome, namely, those of nature and of language. This circumstance is important for

understanding the major principle of organization of Indian philosophical text. In particular, speaking about Śaṅkarā, one can demonstrate that his efforts are directed not to express a structure of consciousness through language, i.e., to organize a semantic field by means of language, but, contrariwise, to act within a text by a meaning, as a specific device. Because of this, the entire organization of text appears to be subordinated to a metalinguistic task: it does not facilitate an establishment of communication and understanding, but creates a condition for an intuitive experience and for a 'step-by-step' reflection (*vicāra*) upon religious experience. In fact, it means a way out of mythological structures, placed within text, by means of the repulsion of textual elements from a topology.

4. If we conditionally depict an intuition of scientific knowledge, for instance, a Cartesian 'speculation' (*lumen naturalis*) as a ray, 'coming out' from consciousness, which captures a certain 'thing' in a field of experience, and returns then into consciousness and there, by means of language's structures, taken from a level of 'common sense', constructs its own structure of consciousness in a shape of sentences about relations, sentences which belong to a language of science, then a process of structuring of consciousness will be extended into eternity [will become endless]; moreover, a capturing of the next portions of experience and their 'naming' in a situation of a limited set of linguistic means will increasingly create linguistic paradoxes. Paradoxicalness can be eliminated only by means of a specialization of the specific languages of science; however, a degree of organization of science as a whole will then be diminished. This, in turn, will lead scientific cognition to the edge of meaninglessness and social ineffectiveness. What will then develop is not scientific cognition itself, but a significant amount of 'beyond-scientific' efforts to organize the social institution of science.

5. If we, for the sake of explication, depict the consciousness of a subject of a religious experience as one that is wholly culturally organized, i.e., is structured as a text, an intuition of religious knowledge, for instance, Śaṅkarā's *aparokṣānubhūtiḥ*, will look like a ray 'coming into' consciousness (since the latter is constantly kept in a subjective state) - a ray which reverberates from the different levels of the structure of consciousness and meets, within this reverberation, neither a correlate required by a normal reflective experience, nor a linguistic denominator (since we are talking about an intuition of a unique object). This leads to a peculiar reflective 'inflation' of consciousness (opposed by its sense and direction to the 'phenomenological reduction' of Husserl). This, in turn, enormously increases the number of reflective levels necessary to a 'mental (re)creation' of religious experience by means of overcoming both cultural norms of behavior and linguistic structures. Presence within a culture of this norm of philosophical activity forces us to change the rules of the social organization and the behavior each time when possessors of this culture encounter a subject of religious experience. This can explain the influence of hermits [*anchorites*] in the process of the formation of Indian society. On the other hand, overcoming linguistic mythologies facilitates a sophisticated and

multi-leveled structuring of consciousness, a structuring, which becomes necessary due to the importance of an explication of religious experience, as a condition unavoidable for a subject if he has to experience, to live 'through' his religious knowledge.

6. By using an example of the organization of the philosophical texts of Śaṅkarā in order to perceive the transcendental, one can demonstrate how this very text is transformed into a device to support intuitive efforts [to facilitate this perception]. Meanings of words within such a text acquire an unusual semantic function. An intuitive influence is realized [by these meanings] through their topological connectedness.

7. The first method used by Śaṅkarā, to organize a text aimed to describe the transcendental (*Brahman*), appears to be a connection of etymological (*nairukta*) and contextual meanings of words. What has been achieved by this single move is a simultaneously proof of the possibility to cognize *Brahman* and a demonstration of the paradoxicalness of sentences about *Brahman* as means to reflect a routine experience within an empirical localization of the word '*Brahman*'.

8. Suggesting a distinction between 'description' and 'demonstration' (in the same sense as it is suggested by Wittgenstein in his *Tractatus Logico-Philosophicus*), Śaṅkarā proceeds to a next step of reflection (*vicāra*): to a pointing out to *Brahman* by means of *adhyaropa* and *apavāda*. Since *Brahman* is supposed to be a continuous subject, and a necessity of his description has been proven already (while the preceding step has just demonstrated its possibility to be grasped (this seems to be so even in spite of a non-adequacy of a human grasping of objective things as of something which exists in space and time)), we will use words in their non-proper sense: we will adjust *adhyagora;* namely, à false attribution of a certain quality to *Brahman*, to *apavāda*, i.e., to a negation of the aforementioned. As a result, text, constructed from such structural connections, is able to influence our subconsciousness directly, without paying any attention to its [textual] own communicating content. This presupposes a conclusion: words used to perceive *Brahman*, should not be understood literally, within the usual practice of speaking, since they represent, even in a better case, an attempt to describe a mystery which surpasses them. Thus we deconstruct linguistic structures and acquire new knowledge. The very connection '*adhyagora & apavādà* is the major structural unit [element] for organizing philosophical text, as has been proven by the example of the so-called 'Non-absent Comprehension [Grasping]'.

9. On the next level *Brahman* 'is named' by a method of *lakṣaṇā*, i.e., by a non-proper [non-inherent] definition. Here we encounter the problem of 'personal language' analyzed by Wittgenstein in his *Philosophical Investigations*. *Brahman* is unique to the extent that there are no words to define him. But since it is still necessary to speak about him, words from levels both of 'common sense' and of philosophy are somehow used. Because any of these terms as such is misleading and cannot give a complete idea of *Brahman*, they are merely used as a connection

which creates an appropriate textual structure in order to determine which meaning is utilized as a particular device. The means of the preceding level find themselves as if inserted into the inner relations between members of this new connection. Within this procedure, one term predicates another, i.e., serves as its definition. Owing to this, a level of reflective knowledge about *Brahman* soars and all notions of the limited and finite are eliminated from consciousness. For instance, in the sentence: "*Brahman* [is] Reality, Knowledge, Infinity", 'infinite' is utilized in a structural connection with 'knowledge', whereas 'knowledge' [is connected] with 'reality'. This phrase as a whole is not compatible logically, since one component eliminates the others. But this non-conformity brings a hope to reveal motives of its construction. This phrase reveals the logical uniqueness of *Brahman*; by its amazing, paradoxical strangeness it preserves and reveals, at the same time, a mystery of *Brahman*. It preserves a mystery because we still have no idea about 'infinite knowledge' or 'eternal knowledge' although we know what 'knowledge' is (this move provides for a penetrability and transparency of the ideas of our consciousness and ensures for the non-existence of any mythologies corresponding to them). This phrase reveals a mystery because it shows quite effectively a uniqueness of *Brahman* among other 'objects' and other empirical 'subjects'. Śaṅkarā defines these two first steps of reflection under language, which result in a specific action of phrases of such a type (i.e., of structural units of philosophical text), namely, in *nivartaka*, 'averting'. A realization of their function consists, thus, in the differentiation of this given thing from any other things by means of a non-proper definition.

10. The third rank of reflection [is] *netivāda*. According to the above-mentioned definition of the genuine nature of *Brahman*, both a conferment of a name and an ascription of actions to *Brahman* are impossible. The only appropriate way to indicate Brahman is to make a certain assertion, *ādeśa*, namely, to say: "Not this, not that". Such *ādeśa* serves as an eliminator of all specifications and all differentiations by confining adjuncts of logical relations. If it becomes impossible for Wittgenstein to communicate suffering, informing about it [suffering] only in a form of a detour definition, then for Śaṅkarā, who proves by his reasoning the impossibility to construct logical relations in sentences about *Brahman*, language as a means of communication, appears to be really surpassed. The only possible way to comprehend is not just to point out "This" (as Wittgenstein does), but to refer to *netivāda* (*via netivāda*), since the logic of *netivāda* does not presuppose any superposition or imposition: an adjunct of a relation does not have a subjunct. This reasoning is directed to language as a means of action and expression and it [reasoning] should be differentiated from, for instance, a 'conscious not-knowing (*de docta ignoranta*)' of Nicholas of Cusa, based on the applicability to an analysis of the idea of human being of the mathematical principle of infinitesimals. This becomes clear from the following. According to Śaṅkarā, any attribution to a subject [human being] is not possible at all. When he is being signified by means of any false (*mithyā*) thing imposed on him, this is also done indirectly. For instance, the words 'I', 'You' (in sentences like "That [is] you") are being used to refer to *Brahman*

not because they can signify him, but because there are no better words. These words signify an actor (*ahaṅkāra*), i.e., a personality. Sense of 'I-ness' [is hidden] in consciousness of 'I'. But this is not a real 'I', since 'I' as eternal subject can never become an object of consciousness and a notion of personality. But because 'I' is contingent (if to use expression of Wittgenstein) to *Ātman*, it often becomes entangled with *Ātman*, while words, which signify it [I], non-adequately point out to *Ātman*, implicate it; the same when we say "A red-hot cannon-ball burns": it is not a cannon-ball which as such causes a burning effect (this is a 'linguistic game'), but a fire quality associated with it. As compared to senses and body a personality is an 'inner' notion and that is why it is closely associated with *Atman*; this characteristic is inherent in all empirical subjects.

11. Words of this sort, because of the *netivāda*-effect, do not determine or point out *Brahman* anymore. Their action is not a linguistic one. For instance, a sleeping man, called by his name, would immediately wake up. If he could hear and understand a call, it means that he did not sleep. But he did sleep and nevertheless woke up somehow. The same is [in the case discussed]: although there is no connection of *Ātman* with an expression of meaning of the words 'I' or 'You' and although there is no knowledge about such a connection, *Ātman* is understood through the meaning of 'I' (*nimitta-kāraṇa*), which acts implicatively, *by means of a text*, and directly influences the sub-consciousness, performs as a form of intuition, as an inner revelation, as an impulse for awakening. And then, according to Śaṅkarā, if language's 'physics' is denied, the very wish [aspiration] to cognize other things objectively, through naming and referring, dies away. Man realizes himself as *Brahman*, and text, by its very organization, deontically maintains a feeling [sense] of the noumenal. Only then does reflection on essence begin and, correspondingly to textual impulses, the levels of such consciousness are built; these levels acquire the shape of certain structures, which are transparent particularly in different forms of religious experience, but which do not find correspondence in scientific terminology - for instance that which designates psychic states (we do not consider reduction as correspondence).

12. To illustrate the reasoning developed above with an example of a construction of the text of 'Non-Absent Comprehension [Grasping]', it is possible to show how its organization is implemented not only in a structural topology, but also in a logical 'approaching', [an 'approaching', which becomes effective] after reflective elimination of linguistic problems [and which leads] to a necessity, imposed by this very text, to actively organize a religious experience. This finds its expression [becomes evident] in a description which concludes this text, namely that of '15 Steps of Meditation' -"Dying around *Ātman*".

MĪMĀṂSĀ/ON CERTAINTY OF PERCEPTION IN *MĪMĀṂSĀ*

Out of all [*darśanas*] only *Nyāya* and *Mīmāṃsā* have 'knowledge' as their object. Just knowledge and only knowledge. The *Advaitin* knows from the very beginning and a problem of truthfulness does not bother him. *Vedānta* has no opinion about knowledge at all: there are only certain instructions about how to avoid mistakes. Yoga *does* not even talk about knowledge: its concern is how to get rid of everything which troubles mind: knowledge does not disturb, that is why there is no teaching about it. For *Saṁkhyā*, on the contrary, knowledge is wearisome. There we have an observer of everything that happens, and he turns from his idle activity only when shouting: "I don't want to know all this . . . " He simply counts everything hazardous and does not want to take himself into consideration, since he is placed entirely in that hazardous surrounding. What kind of knowledge can be found there?

Knowledge as an object of *Nyāya* and *Mīmāṃsā* is different. *Nyāya* is organized as a 'knowledgeable' discipline: logic. By itself, its very rules , it shows *what* knowledge should be. Only *Mīmāṃsā* makes knowledge a content of its interest. The *Nayāyaikas could* think about knowledge what Aristotle thought. The *Mīmāṃsākas could* think about knowledge that Hegel thought. Here is a difference. *Nyāya* organizes everything in the world in order to make it [world] graspable, to transform it into knowledge. *Mīmāṃsā* removes from this world everything that has no significance to knowledge: doubt, chance, existence, experience, and singularity.

The possibility of a comprehensible [graspable] world represents metaphysics of knowledge in *Nyāya*. Its necessity is metaphysics of knowledge in *Mīmāṃsā*.

By approaching knowledge as something 'essential', *Nyāya* and *Mīmāṃsā* apparently cover two major meanings of the word 'existence' (as applied to knowledge), as it is quite frequently discussed by Western philosophers. For *Nyā ya*, 'to be' becomes a last stripping of the subject (possessor) of knowledge into what is said about knowledge. For *Mīmāṃsā*, 'to be' appears to be a cognized necessity of knowledge. If knowledge 'is', any question about its truthfulness or falsity is idle, since false knowledge cannot exist. Authenticity [of knowledge] represents a different case. One can know something for himself, but he has to

make this knowledge authentic for others: until they acquire this knowledge, any proof with regard to *their* knowledge would not be sufficient in principle. Such is the problem.

Well [in response to this], *Nayāyaikas* would rather smile and note that one should first convince himself that he knows at all. Senses might be mistaken by appearances, and the mind itself could imagine many absurdities. In short, authenticity of knowledge is not an argument. Moreover, if we trust self-evidence, the mirages and fabrications can never be distinguished from what really exists, and suffering, because of not-knowing, would be endless. Would it not be better to claim as a foundation of authenticity an external demand to correlate the truthfulness of knowledge to practical experience? As for the content of this knowledge, it always can be reduced to a combination of these very same external reasons. Furthermore, why even talk about authenticity of knowledge if this authenticity is always the fruit of realization of our efforts and of our attempts to act in accordance to our knowledge? Only after experiencing a disappointment in practical activity, can one claim: "My knowledge appeared to be false". [. . .]

These arguments certainly are not the authentic ones. A principle of correlation is clearly suggested as an external claim. Any combination of external reasons if the content of *knowledge* is concerned is nothing else than a suggestion. After taking out of brackets everything which seems to be non-significant, we discover the same knowledge in brackets. This is the prerogative of knowledge: to reveal things in experience for us. External conditions, proposed by *Nȳaya*, are not within these things. And it is no wonder: the *Nayāyaikas* operate not by natural experience, but by the *idea of experience*, which is created for them by the *Vaiśeṣikās* (see 'The Canonical Subject'(1)) A prerogative of knowledge, about which the *Mīmāṃsākas* speak, however, is not just a phenomenon among other phenomena of the world. Knowledge is situated above phenomena, it illuminates them, orders them to appear, and that is why there is no reason to distinguish objects from their cognized meanings. Neither authenticity, nor truthfulness do exist within things as such. It is knowledge, which endows things with the authenticity of existence by making them 'real'. It is knowledge which elevates a criterion of truthfulness into the identicalness of its own content. What *Nayāyaikas* call a correspondence of facts to practical experience in their language, is just a correspondence of previous knowledge to current knowledge-more specifically, their imperative identity, which removes the schematism of time. The so-called 'facts of practical experience' never reach us directly, but always according to a testimony of previous knowledge: of a quenching thirst, an ablution. The Buddhist would argue about the pragmatism of the *Nayāyaikas* as follows: after experiencing a mirage, one can persuade himself: "Thirst is quenched". One could undertake such a transformation of both soul and body that the demand of practical correspondence will be satisfied (compare the reasoning of Buddha about a sour plum in *Surangama-Sūtra* (2): sometimes it is enough just to think about it in order to get an astringent taste in a mouth). The knowledgeable imperative to *Mimamsa* embraces both cases. It is not important

whether we physically quenched thirst or persuaded ourselves psychically: here and there something has been moved in our consciousness, sanctioning an authenticity of realization: 'quenching a thirst'. Certainly, not every thirsty person, quenching his [her] thirst, says or thinks then: "I know that thirst is quenched". This is certainly a slightly unusual sort of activity and is undertaken by peculiar actors. A typical omission, both by *Nayāyaikas* and Buddhists, is explained by an erroneous use of the meaning of certain knowledge. Let us compare:

(1) "I know that thirst is quenched";
(2) "I know that ablution is carried out".

As for the form of knowledge, this is: "I know that . . . "

Buddhists consider [as knowledge] a multiplicity of psychic experiences. They concentrate only on its description, omitting knowledge [of the type]: "I know that..." A proposition of *Nyāya*, from a logical point of view, appears a pure tautology: "Thirst is quenched" (assertion, *pratijñā*) = "thirst is quenched" (description, *nigamana*) within the structure of inherence [deduction]. A principle of correspondence as something necessary according to the very nature of knowledge does not follow here. It is of no importance for its nature that there might be many different cases [such as] (1), (2), [. . .] and this does not influence by any means a mechanics of the confirmation of authenticity of knowledge. As for a pure form of knowledge [like] "I know that . . . ", only a commeasurement of *any given* knowledge is confirmed [by this form]. To discover [reveal] a content of knowledge is a prerogative not of *Mīmāṃsā*, but of *Vedānta*. The *Vedāntins* dare to claim that in all cases (which are certainly different), knowledge has been unified due to its content. The *Mīmāṃsākas* are preoccupied only with ensuring a necessity of self-measuring (*svataḥ-pramāṇya*) for each case of the generation (*utpatti*) of knowledge. Multiplicity, [as well as] singularity of knowledge are not necessary for the [achievement of] this goal. Moreover, they are eliminated by a demand of self-measurement. Such elimination, in fact, is proclaimed by the *Vedāntins* as well (Vidyāranya and his analysis of *mahavidya* as "I know that I know", i.e., "All what is cognizable is nameable" and vice versa). But this elimination is undertaken because knowledge is [regarded as] co-existent with the Universe of things; i.e., seemingly becomes a material projection of a formal claim not to discriminate objects of experience and their meanings within knowledge. The *Mīmāṃsākas*, on the other hand, approach knowledge [as originated] from a necessity of its self-measurement. Immediately after knowledge is thus produced, its objects present themselves directly. Objects of cognition are created by an action of self-measurement: "The proper measuring of knowledge is in the action of a measurer". This is why, regardless of what object is cognized, the very fact of its cognition liberates us from the necessity of proving truthfulness of an act of cognition: because all our activity is already directed (*pravṛtti*) to [work out] a strong belief in its authenticity. Thus, the *Nayāyaikas* approach a construction of logical knowledge, con-

vinced of its determinativeness by [something] external. The Buddhists insist on the illusional nature of experience and consider it admissible to ignore the external criterion of truthfulness. There is no hesitation, no alternative solutions within our mind in a moment of generation of knowledge: we have no doubt that it [knowledge] is true. Knowledge is generated after our actions took place, and the necessity of such actions is prior to knowledge which we acquire [as the result of these actions]. Even if it becomes evident later that this knowledge is generated by an illusion, (and this can be realized only if new knowledge eliminates a given one and becomes authentic), still [it is granted that] this false knowledge, as well as a false conviction in its truthfulness, remain real. The reality of the action of self-measuringness is, therefore, more than just authenticity or truthfulness of knowledge. This is what the *Mīmāṃsākas* mean when they say: "Commeasuringness is inherent to knowledge, non-commeasuringness is alien [to it]". This leads to conclusions important for generation of knowledge: for eliminating 'approximate knowledge' (*bādhākadjñāna*), for correcting distortions [caused] by the imperfect organs of sense and judgment (*kāraṇadoṣadjñāna*). Any reliance on memory is excluded. An observance of all these conditions eliminates the danger of replacing present knowledge with another one and [by this] a demand of commensurability will be satisfied in a material way.

It seems reasonable to start [argumentation] here by pointing to a proper position of the organs of the senses within a process of generating knowledge (from perception). When knowledge is self-measuring, it becomes impossible to claim that the experience of perception appears when the sensory organs make contact with objects. There is not even a need to prove this, except, perhaps, for the *Nayāyaikas* who explain a multiplicity of experience by a diversity of types of contact. It is interesting that the *Mīmāṃsākas* start a polemic by accepting position of the *Nayayaikas* as a fact of existence. Yes, knowledge is generated by different contacts of the organs of the senses with *objects*. The *Mīmāṃsākas* do not seem to realize that there is a conflict between this view and their own principal position (namely, that there is no object beyond a meaning which it acquires in knowledge). They take as a fact that there are senses and contacts with objects - or some peculiar abilities by means of which things are thus cognized. But this fact itself is a 'knowledgeable' fact, a deduced one. The very act of producing knowledge is never realized at the moment of production. Only afterward do we correlate it with the organs of senses. This situation is mediated by an introduction of categories of contact and their subsequent filling [by appropriate content]. Four categories necessary to describe different contacts are introduced: (1) [to describe the contact] of the organs of the senses with the object; (2) [to describe the contact] of the organs of the senses with the qualities of the object; (3) [to describe the contact] of *mānas* with the organs of the senses; (4) [to describe the contact] of *mānas* with *Ātman*. Objects of perception are of three sorts: (1) substance, (2) quality, and (3) gender. This enumeration could be continued.

In order to avoid contradiction the *Mīmāṃsākas* introduce a distinction between definite and indefinite perception. They do this differently than the

Nayāyaikas who take only verbalized knowledge as definite, whereas indefinite knowledge remains problematic for them. The problematic of knowledge for the *Nayāyaikas* is not linked to a natural uncertainty of primary perception, but to its representation within an [idea of] experience by the *Vaiśeṣikās*. The *Mīmāṃsākas* (Kumarila and Prabhara) consider a perception of the singular (*svalakṣana*) to be indefinite, and consider categorical perception (i.e., a perception inserted into [any] one of categories of contact) to be definite. Indefinite perception is therefore obviously psychologized. It belongs to a memory, which is why it is not knowledge. One can say that what they mean here is similar to perception of a newborn baby. The problem, however, is that any subsequent perception is based, by referral, on the former one. Therefore, this former perception has to be regarded as authentic as well. The *Mīmāṃsākas* do not, however, relate this authenticity to types of contact. Perception of a newborn baby is total, unspecified, and in order to ensure the authenticity [of this perception] in this initial form, such perception has to be formed according to types of contact categories. This would make it possible (later, when words are applied to express an experience of perception according to these categories) the meeting of these categories with knowledge divided into existential spheres of five elements, organs of sense, etc. For the *Nayāyaikas*, thus, a countervailing of two types of perception is axiomatic and atemporal: indefinite is logically placed under definite, for a completeness of system. For the *Mīmāṃsākas*, it [countervailing] is genetic and real: the same material [as for the *Nayāyaikas*] is formed, but [the difference is that] something seems to be singular and indefinite before this forming, whereas upon completion - categorical and definite. Both are mutually determined by a necessity of a forming action. A verbalization is only a sign of a completion of this process in the sense that, while it lasts, names for categories (entities) are not just words, but forming instruments and, therefore, not signs of communication. It is remarkable that we see here a perfect coincidence with the normative-genetic psychology of Piaget and a striking difference from the linguistic theories of 'deep structures' (not real, but presupposed by 'rules of a game').

However, an additional problem appears, whether the *Mīmāṃsākas* confuse a logical relation of 'general-singular' with an ontological relation of 'whole-part'. What does a 'perception of singular' mean except definiteness in its completeness and a categorically-formed experience of perception? We are told, however, that a normative-ontological predicate demands a genetic logic, pulled up to ontology, but unrolled into a different knowledge (not a perception). To perceive a class is to recognize any member of this class: any cow inherits gender indications which can be perceived. The Buddhists do not recognize a class: together with the elimination of all cows any 'cowness' would disappear according to them. The *Nayāyaikas* regard any perception to be a combination of three perceptions: general, particular, and singular. This is why, if no cow is perceived, perception of cowness would not be possible, never mind that this perception is of a different origin. For the *Saṁkhyāikas*, a perception of a cow is a modification of a class which seemingly looks to be a representation of a singular cow

but is endowed with all the indications of that species: without such a combination, a cowness cannot be perceived (this view is closed to Buddhist position, although 'generality' is not negated there, being accepted as a function of 'wholeness').

The *Mīmāṃsākas* claim, strangely enough, that since 'cowness' has been perceived, a singular cow has to appear, even if all cows have been eliminated in the entire Universe. The source of such a regeneration is hidden in the wholeness of perception. If we presuppose a thing to be existent, this automatically makes existent all its parts, including invisible atoms. Their perception is just a question of technic. In *Nyāya* they are not perceivable in principle, since the physics of *Vaiśeṣikā* invented them in such a shape that they could never be perceived: without parts. In *Nyāya*, therefore, all parts of a whole are just pure presuppositions. In *Mīmāṃsā* they are the thing's components of [as] a whole, [components] existent due to necessity. The perception of a whole ought not necessarily interfere with the perception of its parts. If we see a thing and know that it is a whole, an ability of self-evidence of our knowledge makes it [perception of a whole] abundant. But the perception of a class entails the perception of at least one of its components. For the *Mīmāṃsākas*, there cannot be a situation with 'no cows', as soon as they know there is 'cow as such': this knowledge is sufficient to affirm self-evidence. Prabhara draws a distinction between 'knowingness' (*samvedyātva*) and 'cognizability' (*prameyātva*). If there is not even one cow, [there is] nothing to cognize. But we could not claim that 'cow as such' is not known at all. This is enough for self-evidence.

In treating the problem of the existence of the singular in perception in this way, the *Mimamsakas* certainly do not admit illusion (*a-khyāti-vāda*). Something identical is perceived within a piece of silver and a piece of nacre if nacre is taken for silver. The perception itself is reliable, only the naming is false. Nobody would doubt this since two true pieces of knowledge - two real sequences of memory - were placed in a foundation [of such a naming]. "Stump or man?" can therefore be said only in connection with something having the properties of only a man or a stump (but not a cloud). These properties, therefore, are truly perceived.

Though establishing ontology of perception as reliable knowledge this way, the *Mīmāṃsākas* situate it [ontology] later into other knowledges: namely, along the directions of five other 'submeasurings'.

EDITORIAL NOTES

(1) This is a self-reference to Zilberman's article 'The Canonical Self in the World of Knowledge: A Note on *Nyāya* Gnoseology', published in *The Birth of Meaning in Hindu Thought*, pp. 180-217.

(2) Zilberman translated this *sūtra* from Sanskrit into Russian; see description of item 1.9.1. in the *Annotated Catalog of the David Zilberman Archive*.

ADVAITA-VEDĀNTA: 'ŚARIRAKA-BHĀṢYA'

When a ray of understanding suddenly dawns upon me, I know without a further word that there is not, and cannot be, any identity between this my condition and you [who is] not understanding. I call myself a 'ray' and you - a 'darkness', in order to mark off [this] non-amalgamation of understanding and non-understanding. Me and my world [are] the world of (everything which is) understood. You and [everything] yours [are] the world of things, of the dark, of non-knowledges. But [in contradistinction to you] I identify your non-understanding and can indicate precisely that 'bracket' [imposing] which makes you a non-understanding [person]. As a matter of fact I initiate my explanations not to explain an essence of this bracket, but in order to make it clear to you. This is why one goal of my reasoning is not a cognitive one, but an instructive one. I make this way through again and again. I display an understanding to you - until you understand. A dancer-primogenitor performs her simple three-color art in front of a curious townsman until he is surfeited with it and says: "Enough . . . I don't see in her performance anything which can interest me anymore". He understands: "This is just a skilful play with colors". And [he] goes away. But I [on the contrary, will stay and] continue my instruction until you understand yourself, until you realize that you are an 'I'. Not an 'I' instructive, but that 'I', who is you yourself. The same [you] who did not understand before.

You, therefore, slander yourself, erroneously draw on yourself from a world of darkness, [a world of] appearances of things, to ascribe their properties to yourself. You personify things by illuminating them by means of an uncertain light of your knowledge and your will to possess them, [while] saying: "They are mine", "This body is mine", "My reason", "I think that two multiplied by two is four". A darkening [delusion] of the first sort is a modalization of thinking in different modes of a judging consciousness. Pointing out your attitude towards objects carries you away, draws into a play of their properties where you forget yourself more and more deeply. Even when you do so in the purest sense for the sake of consciousness: "I am thinking . . . " By thinking you ascribe yourself an existence. But things also exist. According to this rank of existence, then, you put yourself on a level of things and all the consequences of the reification of consciousness will not delay in putting you aside.

The second sort of delusion is an objectification of consciousness. You should know: "Don't create a model [for yourself]". Do not say, therefore: "I am such", but: "I am the same". It is the same as if you have judged: "I think..." And immediately [you] depict yourself [in the following manner]: "I am such: a thinking [person] (or a fat, unhappy, knowledgeable, ignorant, judging [someone] . . .)" But these very definitions you can make about 'him'. So, are you the same [identical to yourself], and if yes, then when?

This delusion of yourself, a delusion by brackets only appears to be a natural ability (or a natural inability) for you as soon as you have identified yourself with a natural thing. As a matter of fact this [delusion] is only an apparent effect, a consequence of non-contradistinction of positions of 'I' and 'you'. A bracket is purely positional and by taking a certain position alone and by its appropriation you yourself make this bracket propositional: [you] work out an attitude 'from a certain point of view'. Thus [in this way] visions [*darṣanas*] have been created. Each of them is an apparent representation, in a form of remembrance, indispensable for realizing something observed before, in a different place. 'Remembrance' - because if you know yourself as the same, you cannot be deluded. 'Remembrance' is the best word to ascertain a similarity: "the same". Multipositionality [springs] from a difference between 'I' and 'you' - [that very difference] which is indisputable. You can lay a claim to something not yours as if to yours; you cannot do that if you know for certain that this is not yours. However, you might see or remember that this [claimed something] is yours and, thus, commit an unjustified transference of someone else's [possessions] into yours. The very thin, judging form of such a transference (of discourse) will be an assertion: "From my point of view this is such . . . "

There and then, however, you have to be quite precise in your understanding and to admit that if multipositionality is indisputable, the assertion, proclaimed just now, namely, that when a difference between 'I' and 'you' is concerned, a definition of 'bracket' [imposing] will have various meanings, depending upon different points of view [of 'I' and 'you']. It seems that by this recognition we eliminate what has just been admitted, and abandon the so-called natural, for no particular reason, talkativeness about this and that, and enter the second level - worlds of 'who, what, and how says'. There, in these worlds, furthermore, we have to remind yourselves [to yourselves, to become aware of yourselves]. If we take yourselves seriously, we cannot avoid admitting that everything just said about 'I', 'you' and 'brackets' has been stated from our point of view. This is what has been stated by us. Others, whom we consider to be ignorant, say [something] different. Thus, a world as such [a world existing for no particular reason], a real world, disappeared. What has been preserved is only a thematic meaning of its things. We talked about the multipositionality 'I' and 'you', about an unjustified [unreasonable] transition ('*atidesha*' = 'trans-position). Let us see and listen to what others say on these topics. [This is so because] we do not have anything else to do: since we know everything about 'I', 'you' and 'transition'.

Some define the notion 'bracket' as what should be applicable to a certain property of one thing [when it is compared] to another (*anyatha̅-akhyavadinas:*

'[those] speaking differently'). Let us suppose, for instance, that properties of silver are being ascribed to nacre. Here is a double delusion. What is not taken into consideration is that 'I' is entangled into a world of things and properties; is judging things and properties. Taking your (unrecognized) delusion as a model you then endow one thing with the properties of another. But even if you combine this objectification with modalization, a gain [prize] is not impressive. It is quite possible to claim: "I think that this is silver (in regard to nacre)". This is a position of *ātma-akhyavadinas*: '[those] speaking for [from] themselves'. [We are dealing here with] the same [situation]: perception of nacre has not been changed (in this assertion without parenthesis). So, we have two cases:

(1) objectification: 'you' = 'he';
(2) objectification with modalization: 'I' = 'you', while 'you' = 'he'; therefore, 'I' = 'he'. Others define 'bracket' as a mistake based on a non-perception of the difference between what is laid on and on what [something] is laid on. This is an opinion of 'akhyativadinas': [those] speaking about [something which] has not been described. They do not understand the difference between 'I' and 'you' and that is why they cannot grasp the difference between things: 'you' = 'he' anyway, since 'I' = 'you'. "Is it really not silver?"

Others, again, define 'bracket' as an erroneous attribution of properties [which are, while they are] contrary to a nature of a thing [to which] something [this set of properties?] is applied.

All these views follow from a 'transposition' [undertaken] under a condition of multipositionality. In addition, even if we deal with the so-called 'common sense' which accepts multipositionality and, therefore, a semblance of 'bracket' [like the following]: "Nacre only looks like silver", "Moon is one and it only seems that there are two moons" – then the main feature of multipositionality, [i.e.,] a transference of properties, cannot be rejected. If [something] "seems to be", then it seems that the position [of 'common sense'] has been occupied anyway, in spite of ambiguous assurances that this is quite on contrary.

But we are perfectly aware that 'I' is not 'you' and that what seems to be, is just a 'bracket'. Therefore, every and any non-knowledge remains [in] a circle of those visions which have just been listed.

Analyzed cases mark visions of four systems closed to the *Veda* (*Mīmāṃsā* and *Vedānta* ought to be described as the purely *Vedic* systems).

Indeed, the first suggestion: an imposition ['bracketing'] of the properties of one thing into another marks an attitude of *Nyāya*: /V/I.

A supposition [assumption] of itself as taking for granted that properties of one thing are imposed into another thing is a position of *Yoga*: /V/N.

A non-perception of differentiation of what is imposed and on what this [something] is imposed on is a position of *Saṁkhyā*: /I/V.

An erroneous imposing of properties [which are] contrary to a nature of a thing on what something has been imposed is a position of *Vaiśeṣikā*: /I/V.

What certainly has to be undertaken here is a further elucidation in terms and images more habitual for these systems.

A substantiation of properties supposed to be [taken as] a hypothetical [undertaken by *Nyāya*] leads to a creation [grasping] of knowledge as a real thing, while a last [closing] 'subject' of the cognitive line always returns to himself [*svarūpa-sambandha*].

In *Yoga* [we can see how] a modification of an inner organ in the shape of certain deviation-'psychosis' is imposed on to an outer thing, on to an object of meditation and is left there, as if a 'psychosis' is one of its properties.

In *Saṁkhyā Puruṣa* does not perceive a difference between itself and *tattvas* of *prakṛtti* and projects itself on to *tattvas*.

In *Vaiśeṣikā,* knowing (a real object of cognitive experience) is substituted by an imaginative, artificially reproduced [object] (i.e., by atoms which this object is supposed to be constituted by), [an object, which] can never be known in its essence (atom is supposed to be an idea which cannot be perceived through any technic of observation).

All of the above is sufficient for an initial representation.

UPADEŚA-SAHASRI (Note 1)

A major distinction and indisputable advantage of Indian philosophical texts, as compared to those in which Western philosophical thought has been presented, is that a sense of Indian texts is never limited by their abstract content: it is accessible to a simple understanding. Every such text is itself determined as quite a concrete and culturally codified means for a thematically-set *type* of communication and as a strictly defined *structure* of human activity. This is why this text, taken as a whole, can be viewed as a complex *sign* of a certain category, or as a method of activity; in both cases, an immediately-grasped content of this text-sign is reflected through its internal form, which itself is a complex system predetermined mostly with respect to its elements (i.e., regardless of its 'abstract' content). What is most important in these elements is not their content but their being parts and components of method. Observers themselves turn out to be 'modally inserted' into a system of activity, linked to an intermediacy of this text, and are included into its content as if twice: through an immediate understanding of the meaning of this text as a philosophical piece, and through a comprehension of its real cultural concreteness. (2)

For instance, everyone can, with adequate zeal, understand the abstract content of the Hegelian *Phenomenology of Mind* as an exposition of the philosophy of the idea which attempts to reach a state of Absolute Idea. However, a symbolic-semiotic function of this text as a transformed model of Christian spiritual culture and, at the same time, a prototype of the Soviet social organization is not transparent here nor can be questioned.

This is not the same with Indian philosophical texts; for instance, with *An Indicative Thousand [Upadeśa-Sahasri]* of Śaṅkarā, which will be discussed here. Certainly, an immediate content of this text can be interpreted as an exposition of 'philosophy' of *Advaita-Vedānta*. In this case, its content will be limited to the abstractness of such an interpretation. But the text as a whole also has a function of a sign-indicator (close to the one in Peirce's definition) and of a lucid methodical means used to organize a tradition of knowledge in Indian Brahman culture. As a sign, it points to a movement of thought away from the philosophy

of activity (namely, from *Mīmāṃsā* as the philosophy and practice of a ritual action), to de-activation. Where this sign points to is not that important, although [one can say that] it indicates a direction taken by psychology (when it follows the venues of pure theorization and critics of experience), and by phenomenology of consciousness (in its pragmatic turn to those, whom this text is meant for). But then its content, as an exposition of the philosophy of *Advaita*, appears to be quite dangerous as far as expression of a specific cultural function is concerned. What is even important in this case is the impossibility of doubting the twofoldness of (1) understanding (as an abstract content) and (2) of a modal penetration of the *Brahman* culture (with its very specific tradition of knowledge).

As we see, a peculiarity of an Indian philosophical text is that this text is not simply 'about something', but 'for something', with a direct indication of its meaning: one should work with this text as with an instrument [use it as an instrument]. Anybody can read *Phenomenology of Mind*; it would be pointless, however, to attempt reading *Upadeśa-Sahasri* if the reader has no intention to utilize it instrumentally. That is, a reading of this text presupposes preliminary training in how to use it. Anybody who knows how to read is able to read *Phenomenology of Mind*. [Not the same with *Upadeśa-Sahasri*]. Someone who does not know how to play violin, cannot use this instrument [properly]. [A person] not familiar with the *Brahman* system of activity can understand words that comprise *Upadeśa-Sahasri*, but is not able to deal with the text properly.

It is well-known how upset Plato was [about a fact] that everybody [within Greek culture] could consider himself a philosopher, although not everybody would regard himself a 'coach-builder', or a 'shoe-maker', or a 'flautist'. He would certainly be glad to learn that philosophy in India became a profession. [. . .]

In India, therefore, [. . .] philosophers were only those specially trained and who obtained a permission to practice philosophy.

How to train such a philosopher, as well as what should be a definition of his 'rights', were the major topic of *Upadeśa-Sahasri* as a *cultural* document.

I. MEANING AND SYMBOLISM OF *UPADEŚA-SAHASRI*

Upadeśa is a peculiar class of philosophical texts close to exhortation, admonition, and teaching. A literal meaning of this word is to point to something, to prompt, to direct attention; a clarification, teaching, communication, advice, instruction, initiation, inducement to something. In a more special sense *upadeśa* means communication to someone about dedicated mantra. It also is an initial form necessary to represent grammatical units (roots, affixes, prefixes, etc.) as they are cited in grammatical texts.

In order to understand the meaning and symbolism of *upadeśa*, let us compare utterances of words of the same root within Greek, Latin, and Sanskrit. [. . .] (3)

In spite of all their diversity it is not that difficult to realize certain regularity. A root verb is a trace [a reflection] of speech behavior as an *oriented* [directed] action. Speech is *eliminated* here. [It has been presented] not as expression, but as direction, reflection, and orientation within space. In Latin this spacing of speech is shown less than anywhere else [i.e., less than in Greek and Sanskrit]. One cannot see here, while talking about something, what has to be done [about this something]; a word as such, tells very little about fact, and in quite a vague manner. The primacy of a word, thus, is unquestionable. Manipulations with a word are not that evident: revelations of a word are shown in description, predication, indication and other nominalities. The very body of a word is not transparent, neither is its function. The social function of a word is noticeable, but its connection to thinking operations is certainly not. A word by itself bears a power to order; it organizes, persuades, and appoints. Nominalism and non-carrying-out-into-the-world are quite noticeable. What occurs in Greek roots is a component of indicativeness, and even more - of operationalness. All roots transmit not an act of speaking itself, but different non-speech actions, for which speaking serves as a mark of their directionness. Imagery and efficacy are brought to the forefront: nominalism steps back. Sometimes a word becomes close to a real thing (*anadeigma*: megaphone) or to an action (*prodeiknumi*: to signify by actions only). That is, instead of speech, we see things and actions, which are pointed out by a speaker: [here we have] a non-linguistic world, namely, a world of logic, proof, discussion, justice, sanctification, construction, etc. But only within Sanskrit are all these connotations objectified into a pure spatial placement, and knowledge is placed in the middle of this spatial world. Consider a sentence such as "I know . . . " which demands an objectivation: 'what'. Precisely this 'what' is placed as an index emanated from knowledge, an index, which modalizes what is known into something that has to be arranged, placed here, or placed there. The Greeks show us parts of the entire process [of arrangement], operations and rules of manipulation [with all this as] applied to an individual acting [active] reflection. In India, knowledge ceases to be an activity and transforms itself into the world of nature. An index becomes a text, which leads away the world and actions within this world.

This scheme will help us understand the major sense of Śaṅkarā's text. It is mainly against *Mīmāṃsā*, philosophy of action. *Mīmāṃsākas* intend to transform action into knowledge how to deal with a word. *Advaitins* move in the opposite direction - from action to knowledge which objectifies actions outside words. [. . .]

A Latin circle of word-utilization can be defined as a *'tantric'* one, because a word, or speech behavior is determined here as action, as a peculiar type of action. A Greek circle is a *'karmic'* one, since any sensible meaning here is simply 'action', not 'action of speaking'. This is why any meaning is a productive one. A Sanskrit's circle is a *'jñāniaṅ*, or a 'gnostic' one, because any sense here

reveals a 'what' of activity, a 'what' of meaning. This is not a 'telling', but a 'from-telling', 'refusing'; not 'predication', but 'abdication'.

Scheme of modal shifts: ((((Y))) N)) I) N

II. LOGIC OF UTTERANCE AND LOGIC OF ACTIVITY

'Paradeigma' is a pattern to imitate, a model, something intended to be imitated, for instance, by a pupil when he compares his actions with those of a teacher. Paradigm, thus, is an externalized, separated other. *Upadeśa* is a suburb, a remote district of the place to which a path leads. That is, a goal in *Upadeśa* is necessarily in its circle, not somewhere outside. The real goal. While going to a city, someone passes the suburbs; entering the suburb, therefore, is simultaneously an indicator of a right way and a part of this way. This is what it means: a chance to reveal and to acquire freedom *within* text. Text, thus, is not 'a means' for something different, even if it is still considered to be a way. Parts of *Upadeśa* are not mantras; they are textological units of a ritual of initiation, which, however, is not a ritual anymore; because by initiating a pupil into knowledge a teacher gives the pupil an opportunity to occupy an out-of-action position: "I *know* that . . . " This 'that' can also be *Upadeśa*, as simply a 'dedication'.

We mean to show, therefore, that Śaṅkarā's *Upadeśa-Sahasri* has, at least, a double sense. From a practical standpoint, this is a means to lead a pupil away from ritualness and towards freedom of action. Theoretically [it is a way] to show him that the world is *essential* only as a pretext to talk about it and to get to know it, and that this is the reason why all the metaphysical ideas of *Vedānta* are more important than their *natural* content, that their philosophical thematic (such as existence of the world, sources of suffering, nature of ignorance, and similar narrative judgments) which, thus, reveals itself only as possible, as a methodological tool. Here *Mīmāṃsā* presents itself as a peculiar 'meta-Platonism', as a stepping back *behind* the world of ideas as far as possible.

Thus, we get to know an inner composition of the *Upadeśa-Sahasri* as an *upadesha*-index, first of all, within categories of activity undertaken between teacher and pupil, and by both of them (i.e., not by just one member of this interaction in particular). Secondly, its index-like nature reveals itself within categories of expounded knowledge, which does not presuppose *any activity* and results in a skilful placement of everything that is discussed after the utterance: "I know that . . . " Here, therefore, index has to lose, paradoxically enough, its symbolism, because the latter needs to be placed in future, in 'possible'.

A duality of an inner form of this text-index is reflected first of all in its composition.

The first part (a prosaic one) consists of three chapters and its content is dialectics of activity to produce knowledge through education [teaching].

The second part (a metric one) consists of 19 chapters in which essential results of this activity, objectified mainly as a didactic means of teaching, are extracted and thematically presented in categories.

The first part begins with reasoning about the method of *Vedānta* in a form of dialogue between teacher and pupil. Here Śaṅkarā shows that the very method consists of the construction of their communication, which can be achieved in three steps: (1) movement directed from teacher to pupil, a 'prompt-indication', i.e., *upadeśa*; in this form it has been shown that the text ofŚaṅkarā is reflected within itself as an element of method itself; by this, a symbolic, conventional role of *upadeśa* becomes particularly evident; (2) *formal definition* of an object of cognition (*lakśanā*) created by the pupil and based on an analysis of chosen texts from authoritative sources prompted by teacher as signs. By this formal definition a sign is transformed into a formal event, into knowledge. This is done by the pupil led by the teacher's instructions. This part goes beyond the limits of *upadeśa* and presupposes an existence of knowledgeable culture behind it, a world of knowledge's culture; (3) critical formal analysis of deployed definitions filled by a content taken from a culture of discussion between the teacher and pupil, a content, in which the whole activity of socialized dividual thinking is deployed. [. . .]

Rolled up in this way, a conversation on method between a teacher and pupil is then unrolled in the ready-made, i.e., objectified entities. A content of these entities, therefore, represents what has been achieved in the conceptual analysis already undertaken. The second part, however, does not bear the character of an object deployed from the declared subjectivity of the first part. The linguistic content is removed and with it we are removed from a sphere of linguistic communication and introduced into a core of an action which mediates knowledge of both. [. . .] (4)

Having determined a principal character of investigating cognition, one should declare a 'non-reducing of one subject to another' (*Nanyadanat*). [This should be so] because thinking is non-distinguishable from being, and cognition is a material process: 'On Earthiness' (of thought). [. . .] It is consequently there and then that it is claimed that a foundation of this 'earthiness' is a reality of 'You-Subject' ("Here you are") as a goal of the entire process of cognition, non-reducible to individual-material intuitions and formations of *Yogin*. Knowledge of *Vedānta* is, therefore, doubly material. This is double knowledge: knowledge of a *Yogic* matter, and a matter of social activity between teacher and pupil to produce knowledge and organize cognition. [. . .]

With this, *Upadeśa* is completed, in its composition and architectonic, as complex knowledge with its inner structure of activity and its function of sign-index as viewed from outside.

Now the reader can evaluate and understand the difference between the Hegelian *Phenomenology of Mind* and *Upadeśa-Sahasri*, in spite of all their amazing parallelism. In regard to the Hegelian *Phenomenology of Mind,* one cannot by any means say that this is either a symbolically-transformed form of *Yogic* experi-

ence, or a symbolic construction of a socialized thematic activity of categorization within a system of a 'teacher-pupil', as of those who produce knowledge'. '[. . .] (5)

EDITORIAL NOTES

(1) Zilberman undertook several attempts to analyze the *Upadeśa-Sahasri* by S̄aṅkarā: the text included in the present volume, its version in a short resumé of *Upadeśa* entitled "Analysis [Sorting Out] of *1000 of Prompts* of Śaṅkarā", and a sketch of an extended, although never finished text entitled "*An Indicative Thousand* or: On Non-Dual Ontology of Knowledge".

(2) This quite complicated passage is expressed perhaps more clearly in another of Zilberman's texts - in *Indicative Thousand*: "The main distinction between Indian philosophical texts and works where Western philosophical thought is presented is that a meaning of Indian texts cannot be limited to their abstract content available through a plain understanding. Each of these texts as such is 'subjected' as a quite concrete and culturally codified means, which has to ensure a thematically determined *type* of contact and is applicable only to a certain *structure* of human activity. That is why each text taken in its complexity may be considered a complex *sign* of a certain category of contacts, or a concrete methodology of human activity, i.e., as 'knowledge' in its subjective sense. Furthermore, its content, understood directly, is clarified by an 'inner form' of such a sign as an integral system, which, taken 'elementally' (i.e., with regard to its elements), is interpreted irrespective of its 'abstract content'. We appear to be, in fact, modally inserted into a system of activity, which is connected exclusively to a 'mean-ness' [instrumentality] of this text and, thus, become aware of its content twice as it were: through an immediate understanding of the *meaning* of this text as a philosophical work (to the extent that we can recognize within this text some familiar philosophical topics and themes independent of cultural content of this text) and through a grasping of its cultural concreteness." (Zilberman. "*An Indicative Thousand* or: On Non-Dual Ontology of Knowledge". Zilberman Archive, 2.1.3, p.1).

Important here also seems to be a continuation of the analysis of Indian philosophical text that is absent in all other versions of Zilberman's interpretation of *Upadeśa-Sahasri*: "What appears to be significant here are three points. First, every such text represents a link in a chain; that is, the reader can experience within such a text a peculiar tension arising as a consequence of a previous work under other texts: those created before this text and would be developed [written] later. It means simultaneously a dependency upon cultural tradition and openness for interpretations as two indispensable conditions to comprehend this text. Even an initial, 'root' text of a certain philosophical system is always viewed as a systematization of some previous, not textualized, legends or other authoritative apothems [. . .] In addition, this text is always represented in a form which demands its further interpretation. This surely reflects an attitude of any text as an organized symbolic construction [directed] towards a living and uninterrupted matter of oral tradition. Precisely in this respect, and in this narrow sense, any composition of Indian philosophical text is analogous to *History* in a contemporary interpretation of this word. Any such text is similar to a historical event; the latter [as is well-known] demands a special treatment, precludes certain consequences, and has behind itself an enormous background of 'life' as something which is always beyond the limits of a historical significance and can never be grasped by a historical consciousness as 'subjectively-meaningful'. Furthermore, what appears to be the most important in this similarity [of text and History] is that a key to understanding a 'root' text is hidden in later texts. However, this analogy is legitimate only in that respect in which the tradition of *knowledge* taken as such, is comparable to the richness of historical events in all their flow. The actual connection here is quite thin and can be viewed as fictitious if we forget that knowledge, in its turn, also has a social-historical nature and somehow has to be reflected in its inner structure. In other words, here one encounters a peculiar formulation of an important philosophical problem: that about Reason in History, or, in sociological terms, about a role of intellectuals in society. Another point is also brought to the forefront. Who is that 'Reasonable Subject'? Or, in other words, who is *the author* of the philosophical text? [One has to

remember that] Indian philosophical texts do not have an author in principle. This signifies, properly speaking, not anonymity, but the presence of tradition which, taken as a whole, performs a role of a 'subject' there. When a certain nominal author reflects his own, peculiar point of view or defends a specific concept this not only means that this is a tradition which speaks through his mouth in this given text, but also that the reader or listener should necessarily be involved in it, should be listed as a text's 'co-author' which, in a material sense, would lead to a more or less different interpretation of the text and be revealed in the creation of a new text, which explains it. Interpreted in this sense, structure of activity in Indian philosophical tradition is much closer to an organization of Western science than to a structure of philosophical activity. This does not just mean, however, that a 'co-authorship' in the creation of philosophical texts does not exist in the West and that scientific production is highly socialized by its nature. What is significant is the very method used to create an object [of analysis], as well as a role played here by a subject of cognition." (Here the manuscript comes abruptly to an end. See: Zilberman, D. "*An Indicative Thousand* or: On Non-Dual Ontology of Knowledge", pp.2-3).

(3) Editors decided to skip this rather extended comparison (5 pages of a single-spaced typed text) for two reasons: it is not closely connected to the major topic of analogy, and this analysis, which is performed by Zilberman in Russian with extreme care and in great detail, seems to be inaccessible to an English-language translation without significant losses.

(4) Here editors omitted another long passage, namely that on the chapters of the second part of *Upadeśa-Sahasri* which seems to be too technical and unrelated to a major topic of analogy. However, one of the conclusions of this analysis is included in the translated portion of text below because it contains a substantiation of interpretation significant for a modal approach, namely that on cognition as a peculiar material process.

(5) All previous exposition is perfectly summarized by Zilberman in a short resume on *Upadeśa: Upadeśa-Sahasri, An Indicative Thousand* is a concise summary of *Advaita-Vedānta. Upadeśa* is of the same root as the Greek 'ipodeigma': prompt, teaching, showing a way. This is an inner, socialized correlate of *'paradeigma'*, i.e., of an example that is meaningful by itself. *Upadeśa* is a prompt in a conversation between the teacher and pupil: [namely that on] how to achieve knowledge. If *'paradeigma'* is a circled prompt, in the sense that different cases can be involved in its sphere, then *upadeśa* (*'ipodeigma'*) is a prompt from inside, an inner prompt, a suggesting a goal. Its action has rather a 'massive' effect: that is why there are so many repetitions. The teacher repeats himself over and over, trying to reach the pupil's understanding, until he finally succeeds.

An Indicative Thousand consists of two parts: a prosaic part as a dialogue between the teacher and the pupil, and a poetic one as an analysis of different thematics.

Teaching by means of liberation is enfolded for the sake of those pupils who want to be taught and trust what they are taught.

A means of liberation is knowledge. It has to be explained again and again, until it is finally assimilated. The teacher ought to explain it to a pupil-Brahman who is indifferent to everything transient and achievable by common means; who rejects wishes for descendants and wealth in this and in another world; who prefers the life of a stranger; who controls his mind and passions; who is close to his teacher and is tested by the teacher in respect of his caste, profession, behavior, erudition, and descendence." (Zilberman, D. "Analysis [Sorting Out] of *1000 Prompts* by Śaṅkarā". Zilberman Archive, 1.7.16., p.1)

A conclusion to this text is important in order to clarify Zilberman's idea of knowledge reflected through this *Advaita's* interpretation. Once again Zilberman turns here to the idea of knowledge as liberation: "Now we explicate an instruction proposed as a means of liberation for those who wish to become free. This means of liberation, i.e., knowledge, has to be declared again and again, until its firm assimilation, to a purified pupil-Brahman, indifferent to everything transient and achieved by means already known, who refuses family and wealth of this and that worlds, is accustomed to vagrancy, is in possession of his mind and senses, is compassionate, reveals all the qualities of a pupil known from the *Veda*, approaches the teacher in a prescribed way, and has been tested by the teacher with respect to caste, profession, behavior, education, and family descent. What is discussed here are rules for the teacher: it is he who must propose the means for liberation, customized, however, to a

limited number of pupils who would really wish to become free [. . .] This means is *knowledge*. What is knowledge? It is a means which is already in possession by someone or which someone can offer to an unlimited number of persons interested in it. It is the only thing of this sort! Like a Sun! It is a duty of a *teacher* to test a pupil who asks for knowledge; the pupil himself does not care. Rules and distinctions are for the teacher, not for a pupil. The same is true for categories: it is the teacher who performs perceptive synthesis. The *pupil* has to satisfy demands. There is no paradox that these distinctions are of no difference for a pupil. Any formal non-correspondence of pupil is just a pretext not to see knowledge." (*Ibid.*, p.4)

WRITING AND TRADITION

Let us consider [. . .] the problems of writing a critical evaluation of opposition between traditional and contemporary societies [. . .]

Within a 'pre-written' society, for which an orientation by tradition was typical, an appearance of an individual actor with [his own] inner orientation caused an anomalous effect and provoked a tendency towards social differentiation; paradoxically enough, the same tendency, although for different reasons, exists within a 'mass' society where writing is considered an anomalous phenomenon. This is not so, for instance, in societies with a dominant enlightening ideology oriented towards the individual, who himself is an educated and literate subject. Any individualization is an indication of anomaly in traditional society; writing contributes to this anomaly, being a means of creating a comparable deviation: autonomization. In that sense it [writing] appeared to be a mechanism to integrate tradition in a new mechanism: that of the meaningful choice [. . .] Writing became a final, definitive step in a process of individualization, the very beginning of which, it seems, coincided with a 'Neolithic revolution'. (1) This process was revealed in a sequence of 'eidetic' representations of an individualized consciousness, which, because of its rupture, acquired a temporal character. Moreover, writing became a final step of the objectivization of consciousness in a temporal succession of symbolic forms. (2) [. . .]

Although symbols belong to culture and appear to be part of its structure, a nature of symbolism is rooted in the ability of an individual to rationally coordinate his actions and to direct them towards certain goals. This is why, when the mechanisms of a social action are concerned, what is meant by them is a certain empirical generalization of the processes of a conscious motivation taken from a position of their functional importance to a system of activity. This importance can be 'measured' by an actor's preoccupation with an object towards which his actions are oriented and by his satisfaction when this [object, goals of activity?] is reached. (3) This is a reason why, in particular, there is no sense in reducing the social behavior of an individual to either 'social' instincts, or 'commands' of the 'genetic code', or elementary impulses of consciousness. Indeed, it is senseless to assert that a content of behavior, even in the most prim-

itive society, can be reduced to a 'blind' subordination to the authority of tradition, because this authority is surrounded by an 'aureole' of a mythical past. Such an assertion is based on a deceptive appearance, and the secret of this illusion is hidden in the ability of an individual to deal with symbols, to posit by their means certain social norms, which later become regulators of individual behavior [. . .]

The meaning of symbols, thus, is arbitrary in an instrumental sense; to achieve the same goal several [symbolic] means can be utilized. A uniqueness of a referent does not pre-determine meaning of a symbol. Here lies the major distinction between symbols and natural signs. Natural signs are the same events in chronological sequence, and individuals cannot influence them [. . .] Symbols, however, appear only within the interaction of individuals with each other (and with natural objects) as with social objects [. . .]

The most important result of any symbolic generalization of meaning, it seems, merely consists of the possibility to communicate, since situations with even one, not to mention two actors, can never be identical and normatively unique. That is why no communication without an ability to abstract, i.e., to reconstruct a certain reality from pieces of different realities, and without a mechanism to identify, as well as to reproduce artificially a sign situation. This peculiar function also presupposes a certain mechanism of de-normativization, which can be defined as a traditionalistic one in the most general sense of the word. In its own turn, however, the stability of a symbolic system, which exceeds individual life and time as such, would not be reached as a new reality resulting from communication between many individuals. A generalized symbolic system, which functions through such a communicative interaction, can be defined as a cultural tradition in a substantive sense.

Thus, let us resume: although symbols differ from natural signs in that they are conventionally created and utilized in a process of communication, this, however, is not a 'lost natural-ness'. A functional demand of consciousness (namely, a demand of operationality) leads to its 'reincarnation' within a peculiar reality, where they are objectified as signs. [Because of that] any appearance of their conventionality then disappears. Such a process of an insertion of consciousness into social action, a process that reveals a structure of social action as its own intention, can be named a traditionalization of consciousness.

Symbols, which possess meanings traditionally recognized within a certain society, create a pragmatic structure of the language of this society. Any language includes grammatical rules, which determine how to construct sentences and build argumentation. Precisely this pragmatic-deontic property of language makes communication possible. Owing to language, i.e., secondarily, people can exchange signs and accumulate an experience of mutual learning. Experience can be textually fixed and become an object of analysis. Such an orientation to a possible utilization is implemented in an ability of signs to be understood in hypothetical modality. In other words, the tradition of meaning expresses a normative function of language, while the tradition of sign [reveals] its valuable

[axiological] projection. These two aspects create two different possibilities: the ability to reconstruct the past and to foresee the future. It becomes possible because of their mutual imposition within the realm of symbols. Thus, a leading tradition as directed against 'the past' (a symbolic one!) is in fact far from an elementary [insignificant] one: depending upon a foreshortening of interpretation, various modalities, which differ in their use of tradition, come forward. It seems obvious that any existing social organization is heavily influenced by ways of utilizing different forms of traditional language available within this tradition.

A tendency to rationalize language's utterances (revealed in a situation, when intentions and plans are well defined, and alternatives of behavior are investigated and estimated, while goals and means are commensurated) does not necessarily mean that an individual is liberated from the influence of tradition. [This is because] language, due to its very nature, is a result of experience and learning. Nowhere else, except in language, has it been so clearly demonstrated that any human discovery and innovation most often is just a small reorganization, a symbolic reconstruction of previous knowledge and practice. If we exaggerate to a certain extent, it can be said that language *en masse* consists of 'functional survivals' [. . .] An individual reconstructs objective meanings through [and according to] signs, and in order to be sure in correctness of his reconstruction, has to prove the result according to tradition [to compare the result with tradition].

The second cause, which connects an individual to the past, is an existence of formal and informal rules for ascribing meanings to symbols mediated by previously accumulated social experiences. These rules form and organize the cognitive motives of individual. They permit us to make a decision in indefinite situations, and helps to reflect upon [empirical] data and authoritative experiences. Utilization of the formal rules of deduction appears to be a significant feature of scientific research.

Both reasons represent two aspects of one and the same phenomenon. To extract meanings from symbols, to isolate a symbolic nature of sign from its meaningful composite, means to constitute a subjective content of cognitive activity. But this activity would never become a rational one if it were not turned against objectively posited rules of this isolation. A subjectively interpreted criterion of this cognitive organization presupposes that an individual apparently views a world in such a manner that his major symbolic characteristics acquire a tendency to harmony and counterbalance. [What is revealed] by this [move] is a 'teleological property' of a human possibility of judgment, which was postulated by Kant. (4) [. . .] While establishing a cognitive balance we strive to understand events in such a way that permits us to strengthen our conviction and attitudes. We react rather not to situations themselves, but to our imaginary interpretation of them. At this point we acquire a connection with the rules of the utilization of signs, [rules, which happen to be] objectively posited to our consciousness. Thus, realization of a cognitive function leads to an idea of normative order. Objectively this means co-existence within any culture of two

organizational-autonomous principles: of activity and subjective notions (linked, correspondingly, to the creation of rules and to their utilization). Precisely because a symbol is not a sign 'anymore' (after it has been transferred from immediate communication into culture, i.e., [when] this symbol has as a referent a peculiar set of inter-subjective activity), and because an idea is not a sign 'yet' (since it is not included in individual utterance), a distinction of meaning and sign within any intelligent representation, [undertaken] on the same symbolic foundation, can be regarded as real.

When a normative activity as such is considered, norms perform as signs of this activity and are perceived as values. Precisely in this sense value can be defined as an element of a certain symbolic system created by this activity, [an element], which performs as a criterion or standard to choose invariants of orientation and remains open in any situation (comp. 5), since 'to close' it again becomes possible only by means of a norm, (taken as a meaning and a rule of utterance). However, any realization of a normative activity deprives it of its normative effectiveness (Hamlet's situation!). An objective representation of a norm, which transforms it into value and allows us by this move to reveal a structure of valuable orientations becomes a logical means to detach a certain cultural tradition within a complex system of activity: a tradition based on a communication of ideas about pleasant and unpleasant, realized as a major cultural goal (see our description of a 'Chinese type' [of cultural tradition]).

But would it be justifiable to consider a valuable representation, which arises when everybody agrees to appreciate a rule for its 'intelligibility', as the only possible form? If we judge from a position of semiotics, where meaning and sign are considered situationally inseparable, a definition of value as a model, a key element in a conjointly created system of symbolic communication, would seem to be universal. But any semiotic representation is 'flat' in a sense that it makes no distinction between a subject as such and that part of a subject, which is studied or represented by semiotic means. These two sides are identified only for a possessor of a perfect knowledge, when any sign necessarily contains a corresponding meaning. But precisely because of that [flatness], semiotics is not capable of explaining the complexity of culture (cultures!); situations of a real rupture, when signs and meanings 'draft' independently [. . .]

So, let us try to explicate a procedure of the phenomenology of cultures and find logical connections between cultural varieties by using writing as a peculiar 'screen', upon which transformed forms of consciousness and culture have been reflected [. . .]

Let us now turn to a particular social situation, keeping in mind that real cultural tradition contains both possibilities and impossibilities. Knowledge which existed and exists in both primitive and contemporary society is esoteric in a sense that it can be communicated only within the limits of a certain, clearly defined group (such as religious groups, ruling elite, political parties, etc.) Existence within society of a group secluded in any way leads to a symbolic of this group, to a peculiar sort of values-norms, and, thus, to different 'traditions'.

If we consider the entire society as an autonomous entity, [which exists] on a background of other 'possible' societies, then, with respect to the high values of its culture, it [society] looks like a transmuted form of an esoteric group. A major problem of inter-cultural understanding is hidden in this [circumstance]. But possibilities [resources] of such 'partial' autonomization are limited by a number of relatively strict conditions, rooted in the peculiarities of the group activity, as well as in human 'material' [. . .] In real social life, therefore, a process of cultural translation is similar to an introduction to some sort of mystery. If such a similarity is not quite obvious, [it is evident, nevertheless, that] this translation can be undertaken within different social groups and embraces various elements of culture [. . .]

Every social group possesses its own means of social translation, where the spoken word, the written word, a system of kinship, or a ritual acquire a certain significance and accessibility for members of other groups of this given society [in order to facilitate them the above-mentioned social translation]. In this sense a ritual is a procedure of turning some signs into meanings, i.e., of extracting them from situations of free choice and eliminating their conventionality (as perceived by the members of the group). Ritual, in short, deprives these signs of their symbolism and loads them with meanings, with objectivity. Freedom of choice is revealed by the external strategy of a group's activity, by the selectivity of its relation to those [individuals] who become an object of the transformation of signs into meanings, and whose values should be fastened by chains of normative obligatoriness [. . .]

A continuity of generations is invariably connected to a transformation of traditional knowledge, at least, within a process of learning, of instruction. [This is so, because] a symbolic nature of meaning has to be uncovered, [for which it is essential] to demonstrate its artificiality in order to master meaning through its reconstruction. Only this becomes a sufficient prerequisite to grasp spontaneity [of meaning][. . .] A theoretical problem appears when we ask a question about the possibility of investigating this transformation. Malinowski in his *The Dynamics of Cultural Changes* doubted the possibility of cognizing elements that existed in the past, and thus claimed tradition to be impenetrable in an objective sense. That is, an idea that value comes before a pure norm (i.e., that a sign was a meaning) or *vice versa* is related, according to Malinowski, to a sphere of pure conjecture and can be attributed to an understanding of culture, but not to knowledge about it [. . .]

However, this opinion is quite sufficient for society, in cultures and in the consciousness of members of which a subjective transformation of tradition (i.e., [transformation of] meanings into signs) is undertaken. This opinion, therefore, becomes doubtful there [if it is taken] as a universal methodological idea . . . [This is so, because] within 'written' societies any 'timeless' preservation of certain materialized documents makes an analysis of those changes, to which ideas and institutes were subjected in time, quite real. It is important to remember, however, that the very phenomenon of 'text' excludes a real transformation of

objective meanings into signs; makes understanding possible only with respect to certain objects (since text is deliberately oriented to the reader). An objective influence, however, is realized beyond text and independently of it. The very text, like a mirror, forms in the reader's consciousness an opinion about the autonomy of his [her] individuality, although the 'truthfulness' of such an opinion is determined, not by the reader himself, but by social circumstances, and if he is [involved, then only as] a part of them [. . .] Where oral tradition is concerned, therefore, a source of the formation of ideas appears to be a norm, a certain rule of realization, i.e., a meaning of communication, while in the written tradition this source becomes a value as an element of objective choice of meanings or knowledge [. . .]

The traditionalism of 'pre-written' societies, as it seems, is directly linked to a situation, in which any translation of cultural heritage is undertaken only orally, and that is why there is neither a necessity, nor a possibility to isolate values: their functional position is occupied by particular persons and events [. . .]

Oral transmission is linked to several aspects of cultural tradition (in particular, to the material, behavioral, and ideological ones). Indeed, any society reproduces through culture its material resources and means of production, standard models of behavior (customs), and, finally, ideas of space, time, causality, goals, etc. Durkheim called these categories "priceless means of thought, which were polished by human groups in centuries, as accumulation of everything that is the best from their intellectual heritage." (6) The role of a word in preserving and transferring these three aspects of cultural tradition is not the same: it increases from the first to the third one, where it becomes just a pure imitation, etc. This is why, within a formal analysis of textual meanings such inequality will necessarily be revealed. In other words, the text of a conversation is structured mainly to [uncover] a third level of [the translation] of tradition. Therefore, within transference of verbal elements of culture by oral means, *tete-a-tete*, this level appears to be on the very surface of a linguistic expression. Two others are hidden within deeper strata of memory and demand, for their actual or material implementation, a 'semantic ratification' (7) undertaken on the higher level of memory. Thus, the structural-ideological characteristics of oral communication significantly influence the content and transmission of 'cultural repertoire' (this peculiarity of oral translation was generalized in a hypothesis of linguistic relativism by Sapir and Whorf). A necessity of a semantic ratification, i.e., of a compulsory confirmation of a necessity for conceptions of material things and customs of behavior to rise to the surface of memory, ensures the establishment of a direct link between a symbol and its referent. Any reference to 'word definitions' is impossible here; words cannot accumulate the consecutive strata of historically evaluated meanings, which they acquire in written culture. Instead of this, a meaning of each word was ratified within a sequence of specific situations; intense oral expressions and gestures followed this. Naturally, one can see a cumulative effect within this sequence, but since the whole variety of symbolic relations is internalized for the individual

within an entirely oral culture, the very fact of the temporal organization of his [her] textual consciousness is not of any significance. Memory of an oral tradition has a spatial structure.

Obligation of semantic ratification is an inalienable characteristic of the spatial organization of memory; because everything actually has to be present in this organization. This was reflected by such a peculiarity of the vocabulary of pre-written societies [. . .] as its detailed elaboration of the thematic of particular interests, customs, and material life [. . .]

All concepts of time and its division within primitive cultures are only a re-structuralization (on a spatial foundation) of some fixed and eternal kaleidoscopic elements, regardless of what 'design' they acquire: cycle, recurrent return-forward movement, pendulum movement, etc. (7). F.Boas was quite right in his characteristic of primitive societies as living without a past (amazing traditionalism!) (8). The so-called process of temporal existence consists in remembrance and forgetting, i.e., in extraction and insertion from and into a mosaic of the very picture of being (9). In this sense, 'elements', or 'letters' are pure intentionals of meaning, and a world-outlook construction is equivalent to a sense of what is really happening in the world. Primitive consciousness does not know 'falsity': it understands only 'right' or 'wrong'.

Writing leads to a rupture within such a unity and generates a sense of history.

A distinction between a primitive consciousness and a historical one is perhaps manifested better than anywhere else in the so-called 'genealogical lines', widespread almost everywhere and known both to pre-Biblical Jews and the modern tribes of Central Africa. (10) Chains of names strung on them are clearly related not to individuals, but to classes; they represent group characteristics, and have a sociological sense, not a historical one. In this respect they are similar to a structuring of human life according to several, not so numerous important moments and turning points in human life. If each moment of time is a constant appearing and [or] dying for a historical consciousness, there are only few such moments (birth, initiation, matrimony, etc.) To a primitive consciousness [. . .] any change of a group's structure, as well as an alteration of its members' status, and, finally, effects of changes within the social group itself, were combined in one paradigm owing to a telescopic effect of counting numerous generations by genealogies - by their 'gluing' and identification within systems of kinship and other similar phenomena - everything, which Barnes so fortunately defined as a 'structural amnesia' of primitive society (11). It is quite easy to interpret this phenomenon as a peculiar homeostatic tendency and to consider it as a mechanism of eliminating innovations both in inter-personal relations and in ideas. Conducting uninterrupted chronologies even in such a highly developed civilization as the Chinese one meant imitating a succession of tracing different meanings within oral communication; this facilitated the assimilation of cultural innovations.

The major function of pseudo-historical genealogies and chronographs is identical to a function of myth in Malinowski's interpretation: they 'draw a

map' of a structural 'allocation' of social institutes and stable cultural ideas that correspond to them. Owing to them, social changes are not memorized, but rather forgotten; they fall from a spatial picture of the world within a projection of events into a timeless mythological background. (12) This feeling of a loss of the past is the most characteristic indication of experiencing a history. Such feeling can hardly appear in the absence of permanent written signs, although their effect significantly depends on the immanent characteristics of writing and those social limits which are imposed on it.

A fixation of the written sign eliminates any task to express, and posits a problem to identify, to interpret. Any intention to keep a factual style of exposition in order to fix social and psychic conditions led to a peculiar apprehension of graphemes which depicted these conditions as their attributes, as indications of things themselves [. . .] Any sign objectively fixed was no longer a reflection of social and psychic conditions and relations. Endowed with characteristics of a construct, it acquired an ability to do an independent translation and thus to govern these conditions and relations. It should necessarily be a written sign. For instance, a quantification of the fragments of a phonetic system had the same meaning for Pythagoreans and Indians. Nevertheless, eidetic reveals its regulative characteristics more intensively, since phonetic system does not create problems for identification. A written sign immediately revealed its value, i.e., its meaning, not only as a subject of communication, but as an instrument of control - through its orientation to a model [. . .]

We will show below that there is no obstacle to reifying a word, and even a sound or a letter under certain conceptual and ideological arrangements. All forms of writing have, as a common property, their *ability to perform as an eidetic valuable pattern*, and mechanism of their utilization does not by any means depend on the peculiarities of these forms of writing [. . .]

The very idea of transferring a sound by a graphic sign is viewed quite often as an inexplicable leap: a rupture - remarkable not only by its historical consequences, but also because of a supposed change of point of view. A possible explanation of this attempt could be through external circumstances, when a proof is being searched for explicitness and autonomy of phonetic writing. These characteristics are pre-determined, however, not by the peculiarities of writing, but by inner functions of the thinking behind it and by structure of that activity in which it has been symbolically utilized [. . .]

A paradox of an alphabet is hidden not in a fact of its appearance, but in its link to significantly less complicated forms of social organization, its close contiguity to oral tradition, its simplicity, and not too high a specialization as, say, in hieroglyphics. Although it might sound as an absurd, it can be claimed that 'letters' themselves appeared before an alphabet, and that their organization into an alphabet is only a latter trace of intercultural interaction and [. . .], in fact, of misunderstanding.

Conventional signs in letters are characteristics of conditions of communication within a primitive social group, where an immediacy of inter-personal contacts was

preserved, as well as an objectification of eidetic representations achieved 'inside' communicating persons themselves which was done through their gestures, expressions of their faces, things of surrounding environment, ritual procedures and experience connected to all of this. Letters here played an indicative, purely-numerical role, having served as an indicator of *order* to concentrate attention on objects, as a sequence of levels of phenomenological reduction of objects into functions of consciousness within a group activity [. . .]

Phenomenological reduction was undertaken not in a sphere of language represented by letters, but in natural states and actions, in objective [object's] reality of primitive consciousness. That is why letters, having performed an abstract role of variables, which [variables] signified logical classes or positions in the topological structure of group activity, were not extracted as specific symbols. A co-placement of letters always had a concrete reference in an object's reality of the cycle of primitive society, in the eternal 'now' of primitive consciousness. A subject of genuine eidetic objectivization (to use the language of functional explanation) became the invariable 'prerequisites of necessities' of a primitive social group, which, owing to their invariability, presupposed transformation of results of such objectivization into characterology, i.e., into an aggregate of situation of pseudo-choice. Real choice presupposes singleness. But if in changing situations the same choice is always made, we have to assume either a recurrence of such situations, or an intention to transform *any* objective situations [representations] into the same ideas of consciousness. Both are pseudo-choices. A change of modality from the hypothetical, once-chosen one into the apodictic one, i.e., [into something, which] invariably presupposes to be existent (V – I) - such is a typical 'alphabetical situation'. In case of the orientation of consciousness to 'prerequisites of necessities', e.g. letters, which signify 'blank spaces' within a formal structure, it is precisely letters that become genuine 'variables of models', since they do not fix these models in constant symbols - do not show what are those *constants* of logical functions of choice are. On the contrary, a situation in which a choice was determined by divination, fortune-telling (N–V) – and in which such definition became a rule – this kind of situation can be regarded as one of genuine choice: an 'anti-alphabetical' situation. Extreme realizations of both appeared to be the Ancient Greek and Chinese cultures, and their relation towards alphabetical writing was adequate to the type of their tradition.

Formal 'emptiness' of letters as significations within the structure of consciousness makes letters the most appropriate means for implementing the synthetic effects of inter-cultural interaction when a genuine transference of inner-cultural meanings, which demands an actual insertion into inner system of group cooperation, becomes impossible. A collision of primitive cultures of diverse ethnic origin with complex and developed ancient civilizations - whose systems of hieroglyphic writing reflected not immanent structures of the group's rituals, but a more or less rationalized normative distribution of functions of cooperation in the shape of ascribed meanings of action in bureaucratic organizations - causes almost everywhere an 'alphabetic effect', which perhaps is the

most evident in the Hellenic culture. This effect is linked to a necessity of an independent choice of a certain meaning, namely, an unknown but important and prestigious meaning which exists in a cultural heritage of an alien civilization. Such an effect is also manifested in an intensive hypostatization of ideas, in an exposure of their ideal content revealed through a hazardous concreteness of a given [. . .]

This process has a purely structural effect called the appearance of the 'cultural and language substratum', and is similar in all these transitional societies. This 'substratum' is a peculiar 'shadow' cast by a newly formed cultural consciousness, a naturalistic projection of a new situation of cultural interaction into a primitive past, a structuralization of this 'past'. (13) Such a 'substratum' is more problematic in the territories of the great Asian bureaucratic societies, but seems to be quite evident on a periphery, where intensive intercultural exchange was under way. Memory about a 'substratum' (and, first of all, about changes which did not occur in language) is a trace, a reflection within traditional thinking upon the situation and process of inter-cultural understanding: an elimination by this thinking of the effects of a-culturation [a caused cultural deviation] by means of a methodological and expressive (first of all, through language) revaluation [. . .] The very process of formalizing a process of accepting the meanings of their own culture, their 'alphabetic sinking' in structures of consciousness, [a process, which] caused the development of mathematics and logic in ancient Greece, was not accompanied by a mass dissemination of phonetic writing just because of its evident merits (simplicity, etc.) [. . .] This situation has its rational reasons in an inner-cultural sense.

Although the most perfect system of alphabetic writing was developed probably in India, the written way of communication was still considered there to be inferior to the verbal one. Like Plato in the *Republic*, the Brahmans considered writing to be a source of erroneous interpretations precisely because it artificially created a situation of a choice of meanings [. . .]

Plato's hostility towards writing is surprising, especially [in light of the obvious idea that] written text can become a powerful means to organize society hierarchically, i.e., that can approach an which ideal Plato held so dear [. . .] Simultaneously, however, words and the structure of text as a regulative means has to be cleansed from their meaningfulness to the subjects of culture. 'Someone' ought to fill cells of text by a certain sense. If reader himself does this, he invariably gets into a situation of reflexive self-determination and self-regulation by means of the text (if the text is not endowed with a meaning of transcendental authority), and thus, becomes individualized and non-controllable socially (as it was envisaged in Plato's utopia).

Something of that kind happened to Protestants as a result of their earnest reading of the Bible. It is not important *what* they extracted [from this reading], but rather, that they *read* it. Owing to this they organized themselves in order not to be subjected to the norms of Catholic society, fell away from its structure, and, as a result, the Counter-Reformation (the Jesuits) had to undertake a great

deal of activity to purposefully discredit the very idea of individuality in all its capacities (here lies the source of the Cartesian doubt and the Kantian criticism). (14) Any reading of text is inevitably linked to an evaluation of symbols with respect to meanings of a changing situation. It was clear enough for Plato, however, that ontology is determined by a deliberate repetition of paradigmatic actions. Text cannot play the role of a direct paradigm, a model of Virtue, a role, which can be fulfilled only by an ideal person. A person can become an archetype, be transformed into a prototype of any behavior, as a result of an immediate repetition of his actions, i.e., to their ritualization. If we take into account the major ontological interest of Plato, then his relation to text can be easily deduced from the statement that ritual is indeed a rational activity as taken by traditionalist thinking, whereas individualization, striving for a uniqueness of temporal existence, is irrational, and thus unreal, since reality is identical to participation in [or following to] an ideal model. That is why Plato's attitude towards writing is indisputably negative. It might be good for every member of the hierarchy except philosophers, if reading would not make the former's uncontrollable. For philosophers themselves, reading is clearly harmful since it falsifies the function of the philosophical mind: to create ideas or to serve as their mediator, but not to expect them appearing from a word, an 'empty vessel'. [What is appropriate] for philosophers is only an oral communication. [. . .]

According to this idea of Plato, the art of dialectic ought to destroy erroneous links of meanings with signs, links, which keep an appearance of a structural invariability of their symbolic design. It ought to restore a genuine situation of constant oral communication, where personal contacts, uninterrupted theorization, and cognition, surpass an expressive feebleness of words. Meanings within such communication are directly transformed into knowledge, which has been deeply imprinted into the souls of communicants.(15) This dialectical process interrupts a fixation on signs; prevents a hypostatization of hypotheses; makes axioms unnecessary; ensures a flow of the processes of thinking by not allowing them to utilize notions. All this serves as a means of immediate apprehension of the primary meanings, or, which is the same, of re-production of ideas. [. . .] Such 'seeing, or perception of a genuine sense' presents for Plato an essence of history as a dialectical process, by restoring a situation of immediate oral communication. The purpose of history, according to Plato, is not to establish individuality, but to maintain intellectuality. This understanding of his, accepted by the later culture as a valuable assertion (an 'axiom'), however, becomes an object of *imitation*. The very procedure of logical reasoning acquires an appearance of a sequence which imitates a prolonged deduction; its function of truthfulness is verified by a peculiar substitution of the invariable meanings or the intentional propositions by a fixed structure of the logical propositions. Plato's 'intellectuality', having been placed in a mechanism of Greek cultural tradition, has been transformed into 'rationality' -as a demand of a formal foundation, of correlation of means and ends. The tradition of the Modern Age [16th – 17th centuries] adopted the idea of rationality and 'axiologized' it, having transformed it into a

criterion of success. This gave a chance to create effective organizations, which goal was to apply a symbolic standard of verification to verify their structure. This structure appeared to be independent from individual understanding; moreover, it apparently did not even require it.

Only then did the 'alphabetic situation' become obsolete. Writing gradually began to transform itself from a means of rationalizing valuable suggestions (in stable eidetic representations) to an irrational factor [. . .] [This became possible because] a machine is also able 'to read' signs as a certain correlation of 'means' and 'ends' (as) if this is posited by a certain program. Not only do individuals aspire to verify their identity according to the signs of writing, they do want to achieve an understanding of each other by this means as well.

Plato's interpretation of a dialectic-historical process presupposes presence of a norm of general knowledge in the minds of communicating persons, a norm, in reality of which their personal position would be coincided. Within a search of an individual interpretation of signs we start an endless dialectical movement between apodictic and hypothetical modes of communication: between frozen metaphors of signs (where a symbol does not bear any affective burden) and endlessly 'thawed out' traditions. This movement is infinite because the process of rational correlation of means and ends presupposes an external definitiveness of the very means: here an understanding of itself through and by text was transformed into an end in itself. By itself the book replaced an invisible supervisor. In order to evaluate the historical consequences of such a 'replacement' (which is the same as to adopt the idea of a system integrity without a category of 'external' - with 'internal' only), it seems necessary to analyze alternative attitudes to a book more carefully. It will help to reveal (this time - 'from inside') certain peculiarities of the position of intellectuals and their function in the stabilization, or, contrariwise, destabilization of social order in the same situations as those analyzed by Max Weber 'externally' (16). Quite symptomatic in this respect seem to be the opinions of ancient and medieval Jewish exegetes, namely, their evaluation of the oral and written word, which was directly opposite to that of Plato. This is connected with a peculiar relation to the text of the Holy Scripture: it is given that the Pentateuch is a living organism, because if woven from the names of Gods, the very 'textuality' [becomes] a metaphor of a living 'tissue'. "Torah is a living body with a soul. It is complete, self-sufficient as a body and has organs." (17) Plato in *Phaedrus* also says that *'logos'* is a *'zoon'*, a 'beast'. But for Plato *'logos'* is *discourse*; organic is not a word as such, but an uninterrupted living tissue of conversation. For Jewish exegetes, the Holy Scripture is a living being, perhaps even in a personal sense. Such presupposition makes reasonable the possibility of its understanding [as] empathy. Like a person prefers to be judged not by his/her external gestures, or actions, but by intentions and plans behind these [external manifestations], the Holy Scripture is expected to be judged as an independently personalized interlocutor, as a subject, individual, co-actor of reflection. "All Torah, - writes Philo of Alexandria, - is like a living body; in a *literal* sense it is a body, while a soul is a hidden sense behind a written word." (18)

A situation of possible personalization presupposes an awareness of a possibility to move in two directions: from a text to a person and from a person to a text. A personification of a text is an attempt to avoid a mediator in its interpretation. This situation here is similar to what every individual finds himself in when, sinking into a book, he isolates himself from an 'actual' interpersonal communication and, therefore, from a life of a social group.

The Torah plays the same role for Judaism as Christ for Christianity. It is a subject for questioning and interpreting. Although the Torah is considered as an organism, it remains a 'quasi-personality'. It cannot have a biography or experience human suffering. This gives the Torah a 'multi-facedness', and a potential to reveal *deontic force* - two venues for the intuition of a reader to explore while reading this text. [Anyone] interpreting the Torah constantly experiences this alternative, and the whole history of its explication is structured by such elements; this is why a 'shadow' of this structure is always present in the history of people listening to interpretations of the Torah.

'Written' and 'oral' approaches were clearly distinguished within the tradition of the Torah's interpretations. The 'written' approach one is the text of the Torah itself. The 'oral' one is a sum of everything ever said about this text, under its interpretations. The oral Torah is understood as a social tradition (i.e., as the life of the people of Israel), supplementing and giving a concrete expression to the written Torah. According to legend, Moses received both Torahs on the Mountain of Sinai and everything that the later scholiasts found in the Torah, or deduced from, it was initially enclosed in the oral Torah, which was given to Moses. (19)

The above can be clarified by the following schema of a dynamic correlation of tradition and culture in its 'sheer', synchronically-analyzed state. Tradition does not only roll up into culture, it unrolls from it as well. In addition, there is a merging of channels of 'previous' and 'future' traditions that takes place somewhere in the culture. This indicates a transferring and repositioning of the content [of these traditions]. Culture appears to be a tangle, a mill, and a codifying device, where wires have been misplaced and redirected. In a concreteness of historical circumstances, any of its face can emerge and reemerge, and thus be shown.

The example just analyzed is clearly based on using a communicative concept in order to describe the correlation between tradition and culture. The written Torah becomes a clear symbol of a *transferred* sphere of the divine, while the oral Torah [represents] a symbol of a *receptacle*, which embodies an energy of activity, incarnated in the life of the Jewish people. Both spheres demonstrate an interaction between God and the 'chosen' people implemented into a unity of the written and oral Torah. The forms in which written and oral Torahs are given (i.e., a roll of the Scripture and a collection of accumulated Talmudic traditions) reflect the deeper unity than the one from which they both originated. A core of this unity is the written Torah, whereas its 'mouth' is the oral Torah. The result, as we see, is directly the opposite to the goal of Plato. Let us show

how this alteration can be interpreted as a source of *impossibility to control* individuals in the quasi-communicative process, where they are free to act in any way they consider necessary.

A provincial Kabbalist of the 12^{th} century Isaac Blind proposed the following comparison (which, however, has its prototype in prophecy of Ezekiel, 6^{th} century B.C.) (20): “The Torah is written by black fire above white fire”. ‘White fire’ is the written Torah that, although turned into letters, is still not explicable in signs. [This was] because a form of vowels and consonants was revealed through ‘black fire’, i.e., oral Torah. This ‘black fire’ is similar to an ink on a parchment. This is why the written Torah acquires a form of the text only through the energy of the oral Torah. It cannot be understood without the oral Torah. Only Moses was able to contemplate a mystic content of the written Torah that was covered by an invisible shroud of white light [fire?]. The prophets knew only transient revelations of this light through instant intuitive experience. Strictly speaking, there is no written Torah: it resides in a *deontic* modality and therefore is transcendent to consciousness. Before putting black signs as its future creation the written Torah meditates over a sheet of white parchment. The oral Torah is a mediator for the written Torah. This is why everything put on parchment is no more than an interpretation and a definition of what is hidden. The very act of creation, however, is real and free. Thus, only the oral Torah ‘is’, i.e., exists apodictically, -as hidden inner senses of words. The written Torah appears to be a purely mystical idea residing in a sphere accessible only to the prophets. A mediation of oral tradition can be undertaken in two ways. The first possibility implies no personification in sign, and what we have is an example of a normatively-non-personal influence of the traditional authority to a certain writer [. . .] Quite possible is another scenario, with the mystical ‘white’ letters residing on an empty sheet of parchment understood as the written Torah (which means that you can write whatever you want, and this written content becomes your guide afterwards) [. . .] According to the traditionalists, in the mystical organism of the Torah both tendencies are blended, amalgamated: there is no written Torah free from an oral element, understood by non-prophets [. . .]

The history of the Jewish tradition presents itself as a structured chain of intervals between the ‘externally’ posited algorithms of social existence. These algorithms could function in two ways: through choice and through anticipation of the results of choice, in order to be able to change them if another choice is more appropriate within the tradition that allows ‘permutations’ only with the binary system:

‘algorithm’

$$-\mathrm{I}\ \frac{\mathrm{N}-\mathrm{I}}{\mathrm{V}}\ \frac{\mathrm{N}-\mathrm{V}}{\mathrm{I}}\ \frac{\mathrm{N}-\mathrm{I}}{\mathrm{V}}\ \frac{\mathrm{N}-\mathrm{V}}{\mathrm{I}}\ \ldots\ldots\ \mathrm{N}-\mathrm{V}$$

intervals

That is, the structure of the European tradition understood from within has the following sequence of transference]: meaning—sign /‘algorithm’/

meaning—sense /'algorithm'/ meaning—sign. This means that a 'half-opened' character of this given social organization and its history corresponds to a definition of the situation of the medieval Jewish community as a 'caste in non-caste society' proposed by Weber: freedom of choice taken internally (the even 'algorithms') and the absence of such externally (the odd 'algorithms'). In such a history, subjects find themselves in a 'partially-controlling' state.

When Calvinism eliminated 'organical-ness' from the Bible, the status of the book was changed again. The idea of Providence, perceived not in a deontic, but in apodictic modality - as a certain fact of the present existence of individual, of his positioning into a peculiar fragment of the real world - demanded its symbolic implementation by means of a free evaluative choice. The rationalization of a 'task' or a 'plan' of action led to a 'turning over' of the historical chain. [Whatever] was happening in social reality became a reality of consciousness afterwards. (I—V). The very role of writing has been changed too. The example of Calvinism is quite persuasive: everybody with a book in his hand goes his own path. The restricted volume of book, its functional limitations, in conjunction with the feeling of a mysterious duty inspired by religious upbringing, understood as [a necessity to follow] the eternal Plan (Providence) were able to generate an orientation of consciousness to a constant newness unknown before. Having closed last page of yet another book, the reader, confident in incompleteness of the Plan (while he was still alive), would ask a question: "What is next?" Owing to writing, individuals indeed became uncontrollable, even though partially compensated by a submergence into another book. Humanitarian education, including the compulsory secondary education of children, transformed this striving for compensation into a real social mechanism of traditionalization, which gradually acquired the status of a social norm that required constant generation of scientific knowledge.

NOTES

(1) Campbell, J. *The Masks of God*. N.Y., 1969, p.140.

(2) *Ibid*., Introduction.

(3) Parsons, T. *The Social System*. Glengo, 1951, p.7.

(4) Kant, I. *Critique of Judgment*. p.115.

(5) Parsons, T. Op.cit., p.12.

(6) Goody, J., Watt, J. The Consequences of Literacy. In: *Literacy in Traditional Societies*. London, 1968, pp.307-308.

(7) Eliade, M. *The Myth of Eternal Return*. L., N.Y., 1959.

(8) Boas, F. The Folklore of the Eskimo. In: *Journal of American Folklore*, 64, 1907.

(9) Bartlett, F.C. *Remembering*. Cambridge, 1950, pp.42-43, 62-63, 256.

(10) Bohannan, L. A Genealogical Charter. In: *Africa*, 22, 1952, pp.3-1,315.

(11) [Source is not identified by Zilberman – Ed.]

(12) Malinowski, B. *Myth in Primitive Psychology*. London, 1926, pp.23, 43.

(13) Frobenius, L. [Title is not identified by Zilberman – Ed.].

(14) Hallorah, R. *Japan: Images and Reality*. N.Y., 1969, pp.160-161.

(15) Plato. *Phaedrus*, 275a.
(16) Weber, M. *General Economic History*. N.Y., 1961, pp.151, 202.
(17) Scholem, G.G. *On the Kabbalah and Its Symbolism*. N.Y., 1965, p.37.
(18) Philo. *De vita contemplativa*. Dordrecht, 1967, p.119.
(19) Scholem, G.G. Op. Cit, p.89.
(20) Ibid., p.46.

TRADITION OF THE IDEA OF MAN

It is amazing to what extent ideas are the products of chance. There is one step, however, from the 'chance' [of their realization] to [their actual] 'realization', as is the case with 'event' and 'being'. It is quite sufficient to have knowledge of: "It is possible", in order to accept a thought: "Something exists". Causality is therefore divorced from ontology.

The influence of the Christian idea was deep and protracted. It makes no difference that it was initiated by a mere bagatelle: by the visions of a sect of enthusiastic drug addicts who received a communion of the mescal extract of an unknown fungus (1). Furthermore, in spite of all the persuasiveness of the arguments of comparative anthropologists who favor the universal diffusion of the major structural scheme and composition of Christian legend (in all times, within all cultures), these arguments are not in a position to disprove that Christians are inspired not by a structural community, but by a belief in the inevitable uniqueness of [everything that] happened (there).

Belief, which is indifferent to any explanation, rejects the accidental nature of a source. Belief is woven from the meaningfulness of reality. Knowledge also contains it. Perhaps, this is the reason why they both can serve as a source of action. But a character of action here and there is different. An object of belief is grounded in belief itself. The act of knowledge is always a transferring (metaphor, 'bracket', transcendence, and categorization). Knowledge sticks the clouds flying in a heavenly ether of values into the diamond steeples of norms. (2)

Something melancholic is hidden for us in the fact that every sense is metaphorical. [It is] something unreliable. Knowledge that contains, in its universality, a unique grain of content, is not indifferent to explanation. [This is so] even though to a question in the Bible: "Where could we find wisdom and where is a place for (of) understanding?" an exhaustive answer that follows is: "Under an apple-tree, on Friday night, in a season of apples, in a full moon. And [this] will be found by a child of (mercury)". (3) Again, some herb . . . If a truth was found it was not in a belief, but in an immediate knowledge. However, there were no witnesses who could confirm this, and a (person, who) aspired to know was absent.

Meanwhile, truth did exist. [What existed was] the most real knowledge, not just a belief. [This was so because] an object of the action was grounded in (something) external - in herbs, recipes, and seasons. Experience can be repeated and thus made universal. Every time this would be the same: yes, I know! But to explain - what: this! - is impossible. As it is impossible to confirm an identity of the previous ('that') and of the present ('this'). (4). [This is so because] causality does not exist, is not a being.

But we would not, following Hume, interpret a cause as a convenient habit of our thinking, or, as Kant, see in it a subjective principle. If a cause were rooted in a subject [person], it should have an ontology - an ontology of a subject and a status of its necessity.

But what does it mean to accept an explanation of phenomenology, in particular, of structural phenomenology? A journey of Odyssey with its multi-layered meaningful structure, strict sequence of events, sinking and rising to the surface, dying and reincarnation, reefing and wrecking - all this was embodied in eternal encounters that patiently awaited this particular [for the reader] moment of encounter for the ages, residing in compartments of [traditional] consciousness that were earmarked by reversed images and reified energies. (5) [The same is true with] the shaman, who claims seven (or nine) twigs of the World Tree and monitors all the horizons of the Universe, past and future. (6) [The same is true with] the miraculous Druid forest, where all human feelings, thoughts, and states, without a single exception, are hung out on the branches of trees and bushes. Or [with] the grandiose Buddhist circle of reincarnation, in which everything happening is possible, while all that is thinkable and reflected upon is a pretext for an action, and thus is happening. Or [with] the Crucified, crying out: "Father! Why did you leave me?" while the Mother-Cross is holding him tight - and he, in order to free himself, breathed his last . . . Everything else is complex, composed from outer reasons, generated by them, and because of that-exists, and because of that - is not a being and thus is subjected to decay, as what was mentioned . . . dying, Buddha.

Structural phenomenology is able (perhaps, only) to outline by [means of] outline a shadow of sense by contour. Its structural grilles with knots, where pictures are caught - are only a shadow cast by a consciousness. Nobody and nothing can prove a genuine reality to all of this.

However, what do we want to explain? An individual can be depicted in all his details. His body, feelings, mentality - all this is demonstrable. Are they not created? What chemistry, biophysics and electronics now promise is a very ancient idea. It is impossible to claim that a skill is older than knowledge. Skill as such is not accidental and that is why skill has been preserved better (being based not on reason, but on function that is always many-sided). Knowledge leaves its traces only in a certain skill, namely the one that is necessary to obtain it. As in psychoanalysis or analytic psychology that are not art, but skills used by people to obtain their 'I'. However, they do not contain or constitute knowledge.

Is it possible that knowledge and sense are unavoidable realities, representing, by themselves a metaphoric nature of an 'incomplete personality'? And where, then, are their cultural roles, their transference by tradition?

Let us test the idea of man through the figment of reality, through the grain of uniqueness. What will we discover then?

Reality is what is not eliminated by any experience. Nevertheless, we know audacious attempts to get rid of the obsession by the idea of man. The American Indian tribe, Bororo, who stark naked, reassures us and is confident that its members are not people, but parrots. A great founder of *Advaita-Vedānta* Śaṅkarā showed that a human body [is] a source of fatigue, pain, suffering; [that this body is] born, growing, and dying; [that] a human soul [is] the origin of concern, fear, guilt, restlessness which induces us to act foolhardy; [that] a human reason [is] a source of thought, a bearer of consciousness and conscience, as well as of unconsciousness. Śaṅkarā showed that even though all the above exists it is not free from causality, it is not necessary, being transient, whereas all [which is] necessary is not transient. And finally, [there is] contemporary science, which demystifies the world with a dry persistency, out of magic goblets of an anthropomorphic illusion. These three attempts are basically the same in their essence. Their essence [is] in transference, in disclosing a metaphor, in pointing out that unreal is subjective, while any idea - accidental.

Yet, perhaps, we have taken a wrong path from the very beginning of our search? For what reason does the idea need ontology? Would it be sufficient that this idea can be utilized in a certain way? As for being a man - [does it mean] a possibility to function (within a society)? In order to explain what is a man would it be sufficient just to show how is he acting?

Let us demonstrate this by giving an example of a mental process of generating ontologies, which ought to regulate human experience by means of the idea of 'Being'.

This mental process consists of a consecutive devaluation of what was previously considered as an object or a content of consciousness, because the latter is identified as unfit, and contradicting, in its 'beingness' a new experience. An opinion [judgment] on something is admitted to be contradictory with regard to a new experience if it becomes impossible to hold this opinion side by side with a new experience, new knowledge (i.e., to combine both in one action or to be oriented to them together). An individual experiences this impossibility more as a psychological fact of his existence than incorporated into a logical structure of his mind. From the position of the psychological subject, this means that a previous experience has to be eliminated. To exclude it means to initiate a new experience, both a practical and intellectual ones, which would radically change an opinion on something. A generation of ideas is therefore a peculiar mental process important for correcting mistakes. But this does not have to deal with any mistakes. We can presuppose that a certain mathematical method can allow us solve this problem. However, it appears that it does not work. A mistake is recognized, but not corrected, whereas the method itself is not discredited. To correct mistakes means to transfer attention to something different, to turn

away from an object or to ignore the [previous] content of consciousness in favor of a new opinion or experience, in which we now 'are sure'. A Bororo Indian refuses to exist as a human being; by believing to be a parrot he joins, in this 'beingness', the ineradicable reality of a clan tradition. Śaṅkarā denies reality of a human being in order not to be mistaken, not to accept this being as a subject of suffering and [thus] to open a way for him to be free. A scientist refuses to recognize in a human being a substance of existence and requires him to be an object of knowledge. Everywhere we can notice an axio-noematic transference. Subjectively, or psychologically, it consists in a distracting attention from an object as it was perceived previously and in a fixing of a mind upon the same object, but after its reevaluation, or upon another object that replaces the first one as a content of consciousness. A subject of the second fixing is ascribed a higher value in comparison to the previous one. This is the mechanics of a transferred sense: to find a sign for meaning signifies a subjective side of ontologization. It is clear that this process is not just an axiological one, in a shape of judgment like the following: "X, of whom [which] I was thinking was good, is bad", or "X, of whom [which] I consider to be important, appeared insignificant". This is precisely what axio-noematics is: "X, according to reasons a,b,c, . . . has to be rejected and replaced by Y", while X and Y can be motions, relations of existence, the physical objects, etc. From the point of view of a subject, to correct a certain mistake is to demolish an object of a previous judgement, as it does not excite interest anymore and thus does not deserve any attention. As we see, here again a certain causality appears, a causality, which does not exist - is not a being. But now its function is finally established: it assists in a normativization of knowledge. Owing to this normativity, a transferred sense acquires a unique content. Its axiological and noematic aspects create a functional synthesis, and the very correction of mistakes is uniquely qualified as a criterion of ontological differentiations. By turning away from a certain object we suppose that it [such an object] is endowed with less 'reality' than the one which will replace it. Our experience shows: the object that is less real can be eliminated more easily, while the object that is more real [is] less vulnerable to eradication. Thus is an ontology of ideas, which, being objectified within a culture, arranges it in a shape of a dynamic hierarchy of normative-valuable links with a changing reality. As a result, culture really appears to be isomorphic to human interest. Together with this, however, its content ceases to be 'human' in the strict sense of the word.

By wandering from culture to culture and reflecting upon them, i.e., by replacing an experience of one individual by an experience of another, we do not however, consider, the latter more 'real' than the former. Each culture is a certain revelation. It is a revelation, in a practical sense, of a possibility to be a man. The reality of every culture is ineradicable to the extent to which a cultural experience, or a state of being cannot be replaced, with respect to any particular individual, by another experience that contradicts it. A reality of any culture [is] a state of a complete spiritual identity of its subjects and culture itself, a state in which a divisibility of a subject and a non-subject, of man and world is surpassed and what remains is a pure unity of immediate knowledge. It stands to

reason that this demand is a certain idealization, but its experience is real; otherwise, an ontology of the idea would be impossible.

Kant mentioned that any ontology is an introductory stage of metaphysics (7). The metaphysics of culture covers both social and individual aspects of human life. It contains, therefore, two metaphysics. If a hierarchy of cultural ideas is constructed in anticipation of a 'metaphysics of sanity' and thus oriented to a normality of inner-cultural existence, [then] an experience of such an existence is ineradicable. It is quite real and not subjected to an axio-noematic re-examination. Subjects of such a cultural tradition would aspire to preserve it and would not agree to replace their existent values by anything else - even the most wonderful values developed by a different culture. Such a temptation - either material, or spiritual, or cognitive - would certainly be resisted. This means that within such a culture one of the possibilities to be a man has been realized finally and forever. If a hierarchy of cultural values is designed for the sake of the 'metaphysics of abnormality', then with all the apparent humanity of a 'clinical' approach the very sense of cognition is lost and the very idea of man has been gradually dissolved under a gray sky of a sick existence. In order to maintain that this metaphysics exists we have to admit that the more man objectifies culture, the clearer are its social and anthropological abnormalities, as well as the impossibility for a human being to be a part of it.

What is placed between the extremes of reality and non-reality is a vast neutral zone of the phenomenology of culture and the reality of social changes. This is a zone where cultures and social relations are composed - a field of the multi-directed traditions of man. To explain what takes place there from the anthropological point of view, four models can be distinguished: historical, structural, causal, and functional. But if the axio-noematic criterion is applied, only two models remain: causal and functional. Historical explanations, to the extent of being scientific, presuppose an analysis of changing causes. To interpret historical events, it is essential to know the indispensable and sufficient conditions of their appearance (the same is true with social-cultural innovations of any type). A structural explanation finally will be reduced to a functional one. Certainly, we could sketch an independent description of the configuration of customs and relations within a certain culture. But when such a description takes place within a structural analysis, it presupposes a certain initial 'principle' behind the customs that allows us to interpret these customs either as the linguistic 'labels' applied to classify the data within a specific heuristic scheme, or as the phenomenological intentions of the actors used by these latter to mark the variety of causes. According to this, to explain the structural configuration of a certain system or the peculiarities of human behavior is possible by using either causal, or functional models. How could these models of rational anthropological explanation be applied to the processes of interaction between culture and individual?

A sense of human order is objectified as a normative order. Social systems are characterized by configurations of inter-directed roles played by members of society and inherited from previous generations. In any society, these roles [have to] satisfy four functional demands: adaptation, accommodation, integration, and reproduction. In order to perform these roles, a memorizing of rules and norms is not necessary (this takes place in animals too), but a foundation instead. A custom in human society means a socially adapted pattern of behavior, widely, if not univocally, followed by all members of society, or certain of its constitutional groups. When a specific custom is absent an individual action is undertaken according to certain patterns of behavior.

Man regards this order as a cognizable one - to its complete immediacy. Realization, teaching, motivation, evaluation - all cognitive psychological variables are objectified in patterns of culture and constitute the essential and sufficient regulations (i.e., causes [reasons] to correct mistakes) necessary for an exact realization of customs and for maintaining an order in a social system.

An axio-noetic method (as an ontological characteristic) of the activity of ideas is revealed in the peculiar situation, when people as a moral order perceive a social order. Norms determine an immediacy of behavior. Rules regulate an immediate behavior. Together they ensure uniformity and, therefore, a predictability of forms of behavior. But if an expectation of satisfying effects, including an anxiety about this, is an essential although insufficient condition to preserve a social system, then disappointment (when satisfaction is not achieved) represents an essential but insufficient condition to rupture a continuity: to change a system. Cultural norms, forbidding the satisfaction of certain vices, create one of the important sources of frustration. The stability of a hierarchical social structure [is] another important source. For instance, if a structural stratification prevents a certain group from satisfying their culturally-approved necessities by depriving them of access to corresponding roles, it can become a source of social and cultural deviations: innovations. Yet this can also be a source of indirect replacements: by means of transference a sense of refusal by interested groups to implement these non-accessible values. This is what finally helps strengthen social stability. If motives cannot be directly satisfied, their intention, goal, act, or agent have been replaced. This changes a sense of a motif and directs it into different, culturally approved ways. New objects in social and cultural systems are found, a […] of new traditions is initiated. A cultural system in that case predominantly fulfills a function of replacing forbidden motives and of satisfying something different. Does it follow, then, that the axio-noematic influence of ideas [is] not ontological, since its reason is always hazardous, and that only an organism of culture possesses a real quality of beingness? A replacement, however, is not the only function of sense. To re-evaluate does not necessarily mean to protect. Sometimes a replacement does not occur, but a deviation characterized by certain causal (but not functional) features. A frustration of necessities (including cognitive ones) is essential, but is not a sufficient condition for

changes. To find a function [utilization?] for deviations [is] one more destination of human ideas [involved] in a process of cultural creativity. The tradition of the idea of man seems to leave a trace not in the acts of transference themselves, but in the values of a higher rank, compared to [values] just abandoned, and created by this idea as objects that constitute different levels (realities) within a culture.

Since everything can be replaced by a new experience, the entire culture is just an appearance. Three types of existence, which exhaust it categorically, can be distinguished within this appearance.

The first type [represents] a 'really existent': a content of the experience which can be eliminated only by ceasing of its experiencing: a theological experience, for instance, and an experience of love, in which [someone] experiencing it believes in a real essence of the relations between him and God or another person. This experience presupposes a subject-object situation, but this supposition is associated with a high order of sense. There is no value here, hence it [this experience] [is] a non-comparable, unique ('priceless') one, and in its reality it represents a pure normativity: an overflowing consciousness. All differences (any other experience) constituted by these differences are obviously fading. This experience cannot be desired because ontologically it always has to be present, although it may be shadowed by something temporal (according to its very definition, since only this experience [is] 'priceless'). Such is the state of freedom in *Vedānta*, and, although differently, the Nietzschian *amor fati*. This experience is natural.

What, then, can be a 'natural' mould imprinted by this untransferable subjective state and reflected in the tradition of the idea of man objectified within [any] culture? Perhaps, it is a principle of the organic integrity that played and still continues to play (although in a slightly different shape: through a notion of 'system') so crucially important a role in social knowledge. Any organism that possesses its inner goal and a natural uniqueness of functional interconnections is a certain naturalization of the high normative sense of what is 'really existent', accessible to human experience and consciousness, and still – apparent and thus can disappear, be distracted.

What is most fundamental in this naturalness? Desire? Love? Fear? No . . . Perhaps, fatigue.

Fatigue is the only human state, in which an organism and its reason are not activated or transferred, but disconnected. Fatigue indicates an organic nature man. "Eternal Gods have an eternal fatigue", - said Hesiod, as if having delimited an inseparable (from human experience) level of reality, an immediacy of self-realization. In the fatigue of a human being, the root of his organic nature is hidden. A 'languor of mind' is a source of its ensuing efforts. Fatigue naturally transforms consciousness into unconsciousness. This is the most intimate and inseparable human experience, free from the shadow of self-evaluation, which is inherent in fear, care, and love. Fatigue is not psychically sublimated. It is an immediate self-consciousness of an individual. In the *Upaniṣads*, fatigue is claimed to be a root source of creativity, since only its inalterability is in a position to endow creativity with a normative necessity. Tired people, as well as tired

cultures, are not preoccupied with the nonsense and trumpery of transient values; they are serious and strive for a true reality. Fatigue is the foundation of consciousness, because it can eliminate it [consciousness] in its own axio-noematic action.

A 'truly-existent' can be also a realization of the idea of a normative-valuable transference. It [the idea] functions among separate objects, those objects which, depending on the method of their evaluation, are implemented in the reality of experience in different ways, and at the same time preserve a peculiar nature inherent to each of them. In that way, for instance, art is experienced. These experiences give satisfaction, which symbolically reproduces an experience of integrity and heartfelt understanding. But this does not prevent us from going from one piece of art to another, does not exclude their multiplicity and difference, which was impossible in the previous case. This valuable projection of the structure of human realization in the world creates a possibility for certain estimations. The first one concerns an interaction of many people, their inter-subjective symbolic communication. The very essence of this realization implies a plurality of its possibilities. It shows that certain fundamental principles, which, according to their interpretation in the psychology of understanding, objectively correspond to psychologically experienced states of guilt, fear, care, etc., are quasi-ontologizations that serve as just a pretext to arrange communication. In their exemplary fashion they represent the plurality of inter-cultural experience.

A 'truly-existent' also appears to be a normative-ideal transference, or a normativization of knowledge. Examples here can be such logical relations as a law of contradiction or a principle of non-contradictoriness, which possess a necessary, inherent function to organize propositional truths. These concepts, according to a definition, cannot be disproved or admitted to be contradictory to any sensible-mental experience. This is what constitutes an anthropological proof of applicability of mathematics and logic to social knowledge.

There are thus three dimensions of a 'truly-existent', which compose a higher level of the structure of realization in the phenomenology of culture. Their negation is equal to leaving culture altogether and as such is an act qualitatively different from the internal transference of sense. The second phenomenological level is that of 'existence'. It corresponds to the content of an experience that can be eliminated by the reality of a previous level, i.e., by a 'truly-existent'. Among 'relations of existence', for instance, a relative experience of interconnection with other actors is formed, in which purely conventional or formal moments dominate. Such an experience has to be replaced by a more complete experience of interrelations of people not as 'actors', i.e., not as 'combinations of conventional roles', but as personalities, as subjective entities, with an acknowledgement of an inner, and not only functional, value of everybody. This confirms that an achievement of a deeper, living level of links, instead of a level of formally conventional ones, transforms a system of social interrelations into a real organism. Every subject of such social interactions can therefore be interpreted as closed to the first type of a 'really-existent'.

When 'separate objects' are concerned, an existence of any of them presupposes a possibility to analyze [each one] as an independent reality. But these objects, with their immediacy, cease to be perceived as truly real and autonomous, if we apply to them a method of ideal type-casting and difference due to some residual categories. Joined together by categorical interdependence, they are now understood only in relation to each other. Thus, all fundamental notions of an existential philosophy and an understanding sociology (including categories of action by Weber) are residual categories, in which an individual existence of objects is eliminated and ascends into a second, valuable rank of a 'really-existent'.

Among concepts, we can identify as 'existent' those logical relations that are utilized in a purely logical system. Logical relations, not possessing the property of necessity and functioning as purely analytical assertions, can be replaced by those relations, which possess a merit of necessity for a mental experience (for instance, a law of contradiction). According to a definition, formal or 'conventional' relations function quite sufficiently only in closed systems of knowledge - logic and mathematics, with formalized languages (see Gödel's theorem). This means that 'existent' knowledge can be realized [grasped] only after its reduction to a third - ideational type - of a 'truly - existent'.

The third level of phenomenology is the level of 'appearance', i.e., the level of subjective actions, evaluations, and idealizations, disproved by the experience of the first two levels. Its elusiveness is linked to an impossibility of some inner-cultural ideas to be realized [implemented], since their realization can be undertaken only through a certain ratification by the tradition of this given culture, i.e., by a metaphorical reflection according to its criterion and scales. An idea, alien to the very integrity of culture, is not different in its reality from a 'squared circle'. It is unrepresentable in its cultural essence and can penetrate it [culture] only under a covering of appearance, an imitation of a certain idea inherent to this culture. Such a 'reality' appears to be borrowed as the immediate experience of values proves. However, even for an appearance of illusion what is always necessary is a substratum, i.e., a certain reality of one of the cultural levels, a reality, which will necessarily be disclosed within the dispersing of an appearance of an alien thing. What is discovered behind a manifest function is always a latent one. This selectivity and sensitivity of culture, as well as its subjectivism [are] the major traces of the protracted tradition of man, the main ways to discover its elusive image. Any content of a sensitive-mental experience, in which a fundamental difference between the subject of a culture and the culture itself is preserved, can be doubted and nullified by this re-evaluation, because of its incompatibility with new forms of the experience of man, who turns from this content to other objects that are more deserving of his attention. As human experience testifies, any judgment about the phenomena of culture - any experience, any belief or idea, which can be represented by consciousness as generations of external causal conditions -is linked to temporal limitations [are limited by time] and can be falsified in principle by a subsequent experience.

An experience of a subject (i.e., of culture), which does not achieve realization, can be revealed by a qualitatively new experience.

Any culture acquires such a property, such a manner of realization reflecting in its inspiration, a dynamic of human idea. This is why an answer to the question about man cannot be given by any separate culture, only by a plurality of all possible types of cultural traditions.

NOTES

(1) Illegro, Y.M. *The Sacred Mushroom and the Cross*. N.Y., 1971.

(2) This beautiful and vague metaphor can be clarified by a parable taken from the history of Buddhism.

Max Scheler perhaps was first in the West to realize that values form a system in that sense; that some of them represent a condition for the others and at the same time they are hierarchically higher than others; i.e., in the case of a conflict of values these first ones are given a preference. It follows [from this] that morally valuable behavior is behavior which subordinates lower values to higher ones and in the event of a conflict, sacrifices the former for the latter. This has been done by [through] reflection, and that is why ideas are situationally hazardous.

The same conclusion was reached by Buddhist philosophers (as usually happened in Buddhism) as an 'essential illustration' to something that really took place, to an 'implemented real'. The Buddhist philosopher of the eleventh century, Jovo Atisa, says the following: "In that time Atisa and other *Bodhisattvas*, 16 people in total, went to Ceylon in order to build a temple to Tantras Gods. They carried a lot of gold for construction. A pilot of their ship was a pirate, who decided to kill them and take the gold. When he was finally ready for that, Atisa and the others were intuitively aware about his intention, since they had obtained authenticity of knowledge. But it was too late to find a way out of the situation. To kill a pirate or to die themselves and, thus, prevent a construction of a temple? Atisa decided the following. If a pirate were to kill 16 *Bodhisattvas* and take the gold, he commits two of the five 'ultimate sins'. First he will have stopped the construction of a temple; this is equal to demolishing a temple, and thus to a turning away of many generations from Buddhism, as if an evil despot forced them not to pray (and not only for that millennium, which passed since that - because a temple is there until now, but for indefinite time). In addition, a pirate will take gold and spend it for the benefit of evil. One can imagine how this person will be reincarnated in a next generation, according to a law of karmic retribution, and how long a time he would have to clamber up the staircase of virtue. Meanwhile, if Atisa kills him, then, firstly, he will render him a good deed, will not allow such a terrible degradation, will sanction belief by the construction of a temple and also as a *Yogin* obtains the power of *Siddha* (he [Atisa], being a *Bodhisattva*) will throw this person into *Nirvāṇa*, momentarily speeding up the transformation of a pretext for his reincarnation under favorite circumstances of a non-realization of evil intention." But (how to reconcile this with the obvious truth that) Buddhism is a religion of non-violence . . . What did Atisa do? The answer is natural (although not to our mind that has not knowledge, but opinion and thus notices a problem of moral choice where Atisa saw just a natural flow [of events] . . .). The temple is on Ceylon until now . . . Therefore, the second 'decision' has been taken. Accordingly, in that case, a realization of the very values themselves was consciously undertaken, through knowledge. What is accidental here is not the Atisa's knowledge, but *knowledge about this accidental decision of a pilot*. And not the cause, but this chance was realized.

Well, but where is the diamond steeple of norm here? It is very simple. There was not a situation of moral choice for *Bodhisattva*. Normativity of *Bodhisattva's* behavior is a self-sacrifice. As a pilot is the last to leave his sinking ship, *Bodhisattva* enters *Nirvāṇa* last, when everybody has been saved. Atisa simply - *killed a person* - and, naturally, by this normatively reprehensible act once again moved *Nirvāna* aside from himself.

(3) Graves, R. *The White Goddess. A Historical Grammar of Poetic Myth*. N.Y., 1948, p.263.
(4) Saunders, Y.T., Henze, D.F. *The Private Language Problem*. N.Y., 1967, pp.178-180.
(5) Campbell, J. *Hero with a Thousand Faces*. N.Y., 1970.
(6) Sanders, Y.T., Henze, D.F. *Op.cit*.
(7) Kant, I. *O voprose predlozennom na premiyu . . .* vol.6, Moscow, 1966, p.180.

THE HELLENIC TYPE OF CULTURAL TRADITION

Close attention should be paid to the absence of a sign of norm in the transformation of consciousness within this and a logically (and partly, historically) 'European' tradition following it. The norm is not present here either as a transformed unit, or as a result of transformation. This means that in both cases we cannot form a notion of a 'partial institution', i.e., of a certain institutionalizing entity of consciousness equivalent to the entire normative system of culture. (1) This formal fact generally corresponds to a habitual idea about a loss or partial oblivion of tradition in societies of these types. In Plato's *Timaeus* an Egyptian priest tells Solon: ". . . you Hellenes are nothing but children; there is not an old man among you. . . . in mind you are all young; there is not a single old opinion has been handed down to you by ancient tradition, or any science hoary with age." (2)

One can presuppose that the problem of the absence of a normative criterion, so important to Hellenes, was quite conducive for creating a characteristic for their *organizing* type of thinking. Its major task was to transform a certain set of assumptions, or a particular axiomatic, into an integral system of *theoretical* knowledge, by reproducing and repeating, in its complexity, a certain primary *organizing idea*. It can be claimed that the Hellenic type of culture gives an example of a conscious attempt to replace a partial institution by a certain principle of organization; this seems to be quite an important step. The results of this replacement were soon revealed both in tendencies to develop ancient civilization, and in circumstances to form major features of the 'Western' type: ideas of scientific activity as such, of its goals and algorithms, of applying scientific ideas to a human being (in, so-to-speak, an extra-scientific sense when scientific activity is understood as a quasi-institution, a complete personality), as well as to the historical consciousness oriented to innovation and a future state of society as non-traditional in its essence.

In order to adequately grasp what is to be developed below, one should realize that by placing himself within an *axiomatic type* [of cultural tradition] an author does not limit himself by demands of indispensable factualness. The hypothetical character of thinking [within Hellenic culture] implies a possibility

to grasp "how it *might be*", not just "how it *was*". [. . .] What interests us is how a phenomenon of hypothetical thinking is possible in principle, as well as how this type of thinking can be transformed into the apodictic one and thus organize itself according to a certain scheme, which means the transformation of values into ideas (when applied to culture), the transformation of character into interest (when applied to behavior), and the transformation of sign into sense (when applied to consciousness).

When the first member is analyzed, [it becomes evident that] a primary hypotheticalness of culture presupposes a break with previous tradition, either with its own, or with traditions of neighboring cultures. This puts a 'hypothetical' culture into a typical position of a 'godmother', and this situation, reflected by the very structure of this culture, is experienced within the consciousness of its members as a constant feeling of 'cultural curiosity', the nearest example of which is the famous 'curiosity' of Hellenes. Such a situation can be easily ascribed with an axiological sense, when the 'hypotheticalness' of the Hellenic culture is explained by its constant interaction with ancient Middle-Eastern civilizations, and this interaction is viewed as responsible for the absence of a unified normative structure and a non-translatability of cultural norms.

The second member of this scheme shows that a decisive factor for 'interest' [within the Hellenic culture] becomes its 'metaphysical' determination by 'character': ethnic [character is determined] by a system of up-bringing as a means to organize culture; political [character is determined] by a system necessary to organize social life through the reconciliation of diverse sources and figures; and personal [character is determined] by a theoretical mastering of reality. One may find a peculiar example of the first case in a transformation of secluded cult organizations into instruments of social-political action (for instance, the Pythagorean union and its role in forming culture through the idea of musical upbringing). As to the second case it becomes important to single out institutions and organs (first of all, legislative ones) with a special task of management, defined through a concrete idea which corresponds to their nature (and from there to a multiplicity of 'ideas': of state, legislature, law, economics, etc., each with an autonomous organization). An example of the third case can be seen in Herodotus's preoccupation with history; he narrated the events of the Peloponnesian war with only one goal in mind: to show how a certain combination of human qualities is organized in a sequence of actions, so that the emerging reality can be perceived as a 'fabric' of human interests entirely created by their characters.

Finally, the third member can be described through organization of a thematic, especially, philosophical knowledge which is regulated by [the idea of] correctness and which aspires not to preserve the immediate *meaning* of experience but to keep its truthfulness. This identifies the correspondence of newly organized senses as occurring through the content elements of their structure about which a certain preliminary agreement exists (principle of formal reduction of the sense of theoretical constructions to signs of elementary terms). The

hypothetical character of consciousness proves that a formal verification of knowledge says nothing about a real validity of rules according to which immediate experience is organized. To keep the very principle of verification appears to be plausible only with the introduction of an auxiliary independent condition: hypostatization or reification of axiomatic presuppositions. This means a change of modality: reflection starts with "let us suppose that . . .", and knowledge is built independently of what is genuinely significant. All the facts listed above can be 'naturally' explained by the idea that the very perception of a conflict situation as a natural one is grounded within culture, behavior, and consciousness, i.e. that a 'meaningful absence of a norm' is taken as corresponding to the true state of things. This is why any attempt at a non-theoretical, practical realization of hypostasized ideas in social organization has to lead to various anomalous effects (since life is based on the foundation of pure meanings which symbolism and conventionality are eliminated by normative rules). These anomalous effects are generated by certain paradoxes of consciousness characteristic for the type [of cultural tradition] where sign is transformed into sense without looking back to the rules of such a transition. We will return to the consequences of this when the characteristics of the organization of science within contemporary society are discussed. For now, only the connection of the hypothetical modality of thinking to the idea of normality of conflict, as implanted within a culture and determined by its organization, has to be underlined. [. . .]

The way to resolve a conflict usually presented as imposed by Destiny is viewed very similarly to a transformation of nasty Furies who chased Orestes into the pleasant and fair Euminides. In this case, the immediacy of the ancestral tradition is broken: the ideal of 'I' as a member of a clan first has to be *presupposed* and only then reincarnated on basis of such presupposition. [. . .]

What does a symbolic sense of organization of life for the Greek consciousness consist of? [It consists of] a real or a ritual-conventional 'travel to the East', to this, according to Schelling, 'motherhood of ideas' and a source of all matrilineal Greek clans' genealogies.

An immediate sphere for implementing this aspiration is knowledge accumulated by great and ancient civilizations of the Middle East. However, knowledge circulated within the social organization of these civilizations was not shaped in a form found on the 'entry' of Hellenic transformation. It is important, thus, to analyze the social effects of 'intercultural misunderstanding'; in particular, of the vital significance assigned to a cognitive function as a personality-creating principle. [. . .]

The very turn of Hellenes to their 'matrilineal sources' resulted in the accessing of ideas not in their immediate meaning (or social determinativeness), but in an hypothetical-mathematical sense, and later - in a naturalistic sense. The history of Greek philosophy with its transformation from a natural psychotechnic into a natural-philosophical knowledge (always hypothetical, isolated from immediate experience, and always mythological, but with a gradual mythologization under an apodictic form of a naive statement: "This is") - is a convincing example. This was

a reason why, for instance, a major social division between free citizens and slaves in the Hellenic world was perceived, not as a social problem, but as a natural phenomenon ('slavery for non-Hellenes' is an axiom, and that is why this was so). The naturalistic preferences of Aristotle are the most characteristic in this respect; he was much more consistent in his 'naturalism' than Plato who was a mathematician and 'myth-creator'.

That is why a choice between various social actions was perceived there entirely as a *political* problem of maintaining a social organization 'as if by natural means' (most famously exemplified by Solon who established a new set of laws in Athens and left, in order for this law to be 'naturalized': ingrained normatively in social reality (V —— I). Limitation in choice, from which the very need in politics arises, would then be perceived as something natural and thus resolved by a constructive means of natural action (for instance, by musical upbringing which became a cornerstone of the 'external' policy first for the Pythagorean union and then for all Hellenes, due to the political activity of the Pythagoreans who became professional 'normographs' of Greek policies). [. . .]

The hypothetical position of signs as essences was one of the major reasons of the absence in the Hellenic world, as Weber points out, of either a 'social question', or 'social problems' of any sort. 'Social problems', experienced subjectively, were perceived as the political problems of a free citizen of the polis, as dangers threatening civil equality (for instance, de-classification resulted from debts and property loss). Precisely because Plato and Aristotle did not consider the state (i.e., organization) as society they did not view this as a normative problem; what they suspected was a problem of its correspondence to axiomatic principles. This is important for understanding how special tasks of cognition, its adequacy and determination can lead to various social effects, in particular, to regarding science as an organizing force of social life: as something which controls or directs behavior with respect to natural objects and their regularities. [. . .]

The cult of Apollo-Panacea (the 'All-Healer'), elevated by the Pythagoreans to the normative structure of the Greek sacred place, the Delphic Oracle, is a particular projection (both religious and political) of the most important action: a harmonic 'logization' of thinking as a *complete* representation of human being. The rationalization of ritual, undertaken by the Pythagoreans, was in fact an explanation to patients of their psychic experience ('suffering') as signs of something external and natural (music). Musical harmonies quite naturally served as a universal remedy for understanding any connection between various components of human behavior. Their application allowed for the isolation of human behavior from the immediate influence of [anything] external and caused, because of their externality, irrational suffering and the present individual with a task to organize life as a feasible undertaking. This was the way of forming the Pythagorean ideal of a 'philosopher' as a perfect musical instrument, for which all natural phenomena served only as symbolic correlates of his own organization. It is quite significant here that a psyche of an individual was neither constructed, nor created according to, for instance, his inner wishes

(an immanent will), or external compulsion (as it was in 'Indian' or 'Tibetan' types of culture). It was organized as something external to the organized self: [as] a flute or lyre to which multitonality is *naturally* inherent, but by which a harmony is *created*.

A cosmic personality cannot create something new, as novelty would eliminate the possibility of verifying a psyche's structure. An axiomatic supposition of correlation of psychic experience to the harmonic standards carried outside means, as a matter of fact, that an individual is excluded from communication and locked, through the cosmos, within himself. If, for instance, in psychoanalytic therapy, or in Hindu initiation, as well as in the Tibetan influence of a teacher upon a pupil, communication is constantly maintained, then the 'axiomatic' Pythagorean healing is an autonomization of personality as a self-sufficient and self-legislative agent. The anti-anomalous intention of such a step is quite evident, since the only possibility for a suffering consciousness to rid itself of the diverse normative influences which tear it apart is via 'phenomenological reduction', 'naturalization'.

To create an ideal of 'harmonic personality' is, in essence, to reduce a *human being to an organism,* hence the enormous teleological imperative of such an ideal (very influential long after its creation and still valid now). Teleologism reveals itself in looking for a criterion for any outer situation (including a social one) in principles of a 'harmonic construction' named 'microcosm', i.e., personality in axiomatic sense, consciousness [. . .] (with then inevitable 'inflation of consciousness' (3)). Such a rationalistic conviction has as its consequences recent problems in applying mathematical methods to social and psychological processes. A tragedy of Greek consciousness is precisely in its naturalness. This is so because its organization according to cosmic cycles has a totally different character than organization in primitive society where it has been realized from time to time, in periods of 'participation' and confirmation of 'group sentiments' according to traditional patterns, while between these periods its economic, personal, etc., behavior is 'hazardous', i.e., potentially-free. Greek consciousness is not periodical in this sense. It is imprisoned entirely within logical canons of its organization and has, therefore, only one exit - to the short relaxing periods of Dionysian revelry which are not above-rational, nor anti-rational, or irrational (a self-sufficiency of above-rational, i.e., something which includes rationality does not fit into a logical canon). That is why Platonic ecstasy appears to be ceremonial and empty.

An excellent example of 'deducing' some utopian social construction from a symbolic structure named 'personality' is presented by Plato in his *Republic*. It is a utopia not because it does not take into account social regularities, but because it does not realize subjective anthropological characteristics. Starting to construct his ideal state from a political side (Books I-IV), Plato turns to problems of social organization, through optimal structuring of the 'personal' qualities and characteristics. The idea of *justice* as retribution provisional for *any* person is rejected from the very beginning; instead, a reasoning about hierarchization of justice is

unfolded, [reasoning, where hierarchization is treated very much] like a harmony of human virtues and states of the human soul (while a thought of a reasoner is turned not upon a scheme, but upon figures, which have to resemble this scheme). As a result, 'ideal justice' turns out to be a pledge for the immortality of personality in its eternal movement. Plato undertakes a special reasoning to transit from a personality to a social organization: to extract from the former principles of the latter. This reasoning has a central position in his *Republic* and primarily concerns the principle of correlation within a notion of personal [individual] and common justice. And here a *symbolic* (i.e., a non-individual) character of the metaphysics of Hellenic transformation becomes quite evident. Plato demonstrates how a type of hierarchical personality is organized (when behavior and symbolic representations are concerned). [He deals with] a personality, in a structure of which a *notion* of justice (not justice itself) finds its logical 'place'. It appears that Plato's construction of a social utopia is ended by an appeal to transform the problem of political choice into a task of status distribution - a task which can be accomplished, not within individual consciousness, but only in a social structure. In other words, the very logic of idealization leads Plato to a type of society which resembles an Egyptian one (although not because of a direct imitation, but as a result of teleological qualities of its organic prototype in human being). This status distribution, however, is not ascriptive; it is nomothetical (because, according to the logic of organization within Plato's ideal, politic has to be transformed into *socionomy*). External pressure is required, therefore, for the ideal 'to fly': taken as such it cannot be 'partitioned' for the simple reason that people are 'not perfect' (let us note that four types [of cultural tradition], analyzed before, achieve a perfection all by themselves). If so, then one can take the Hellenic symbiosis of the Greek polis and the Eastern bureaucracy as a temporal historical 'palimpsest': as a repetition of Plato's logical reasoning:

value (V) — idea (I) idea (I) — norm (N) norm (N) — value (V)

The result of this is a neutralization of both social and political problems within individual consciousness, which is characteristic for both the East and Greece (although for different reasons). This also finds symbolic representation in the early Christian canons where, on the one side, the structure of the human soul is [taken as] a genuine 'society', while, on the other, a canon of 'Caesarian – to Caesar' as an expression of extreme political indifference, is claimed. [. . .]

EDITORIAL NOTES

(1) Zilberman gives the following examples of 'partial institution' within different cultures: "In the case of traditional Indian society, partiality must be ascribed to the institution of professional intellectuals, the Brahmins, whose methodological functions (mostly centered to cultivate Vedic knowledge) acquired the features of an artificially induced all-societal establishment. [. . .] *Power* will be the partial institution of the 'Tibetan' type. [. . .] *Family* will be the partial institution of the 'Chinese' type of cultural tradition. [. . .] *Individuality* will be the partial institution in the Japanese

case. [. . .] As for the remaining two types, limiting specifications should be inserted. In the four preceding cases, norm was something present in thinking. It was experienced directly by consciousness as a kind of 'natural law' or, objectively, as a traditional and subjectively traditionalistic action. But in the 'Hellenic' and 'Western' types, norm sinks into non-being. For this reason, neither an idea of *organization*, as a quasi-partial institution in the first case, nor a concept of *personality* in the second, can be introduced by *natural* demonstration, as *objects* really endowed with universal cultural sense. The elusiveness of cultural norm can be recognized in subjective complaints about the transitoriness and decay of the once harmonious traditional organization of the world, in the first case, or in the no less subjective belief in progress and personal autonomy, in the second. Hence, the first four types of societies are usually called 'traditional', while the remaining two are characterized as 'changing' or 'historical'." (Zilberman, D. 'Understanding Cultural Traditions', in: *The Birth of Meaning in Hindu Thought,* pp.319-323)

(2) Plato. *Timaeus*. N.Y.:Random House, 1920, 22e.

(3) Zilberman already explained this phenomenon in his dissertation, namely, in exploration of the subject of knowledge within Indian traditional culture. In the present book this explanation is published in the Chapter 'The Indian type of cultural tradition'.

THE WESTERN TYPE OF CULTURAL TRADITION

This type correlates to the Hellenic tradition approximately in the same way as the Chinese tradition to the Japanese one: they are symmetrical. And as with Zen-Buddhism, which while transferred from China to Japan was transformed from a form to express something *external* to culture, something experienced mostly in the aesthetic communication to the essential core of a culture, to a marker of the immanent tradition. Its 'plastically' formed idea of anthropomorphic organization is subjected to the same evolution of transforming, from inside out, into a notion of 'personality'. This idea is quite definite and well-placed, but, nevertheless, real, non-reducible and revealing its *nature*, first of all, in activity. This 'non-reducible' personality can be also named an 'individuality', but in a special sense, different from a Japanese one. Here individuality reveals itself not in an instant action, in a caprice of a willful action, but within a *lasting* effect, *in time*. Its essence appears to be hidden in a constant countervailing of independence and in a non-reducibility to something different and external: a clan, group, organization, and, finally, society. Thus, individuality can be revealed in a lasting, uncompromising supposition [countervailing], in an ideal firmness in conflict of 'I' and 'non-I'. Such a conviction generates around itself a number of ideas and problems, similar to dispersing circles on water: 'objectivation', 'alienation', 'kin [society] and individual', 'existence', etc.

Independent of whether we consider personal aspirations to be a product of a romantic myth or a renovated Christian influence, their very presence as an obvious force, which determines behavior, has a primary [. . .] importance. These aspirations certainly help an individual to find his way within social entities, fragments of culture, and society as such. It seems, therefore, these qualities/aspirations draw personality near a 'partial institution', especially since a personal [type of] consciousness creates its own type of thinking, an 'imaginative' one. Indeed, personality has to maintain its originality in respect to something different, not by simply countervailing it, but precisely, by 'imagining' itself in it or on its background. That is, an ambition of personality is neither in a simple projection, nor in an opposition, but in an introduction of its own uniqueness, in imprinting its trace, its style to something different.

Thus, personality is 'anomalous' in its very essence: it cannot identify norms and the status of a group, clan, organization, and society as adequate to its nature. It exists as if outside norms and status. In that sense personality, which is 'such' from the very beginning, has to be distinguished from an idea of *organization* [which was previously considered to be specific] to Hellenic thinking, where a situation of anomalous conflict was finally resolved within organization. Here non-normativeness is a certain initial, immanent state, and personality can only *temporarily imagine as its own* those values of organization (of clan, group, society, and culture [. . .]). This looks like a phenomenal projection of the essence of historical consciousness included into organizational contexts and formations which imprints its trace and leaves these contents there immediately.

A permanent mutability is taken by personality as its inner 'freedom', whereas a search for historical sense of transitions, more correctly, departures from any normative structuralness, generates an idea (not so fashionable now) as to a primary, non-status, unstructured 'communitary-ness' (from Latin '*communitas*') as different from ancient freedom, without any social differences and norms. Such a state is usually attributed to a remote, primitive past. This is not just a projection, similar to the Chinese tradition, where thinking spreads its 'familistic' nature onto the whole world. This is 'imaginationness', an aspiration to present some quasi-reality of the 'partiality' of a personal state, an intention 'to imagine itself [as something]' or 'to imagine [something] to itself'. Any human society, even the most primitive one, does not resemble this image even remotely. [. . .] Nevertheless, there, as well as within contemporary societies, a peculiar form of human existence can be realized, a form, which suggests to some social philosophers (like Rousseau), and to some anthropologists (like L.Morgan and his followers) an image of a 'communitarian' society of the past. This form (let us call it a 'thresholdness') is not an invention of European history. A 'thresholding' consciousness and, corresponding to it, state of structural formativeness can be viewed as 'eternal protagonists'. Consciousness of the first type imagines itself within the second as within different social situations; but only after the 'restoration' of this idea in the Hellenic principle of 'human organization' can it [consciousness] turn to itself and try to find its own nature and regard this search as its special task. It is precisely this task, moved forward as a peculiar value, that becomes a specific feature of 'Western' or a 'scientific-historical' type of tradition. An extraordinary receptiveness of this tradition to other forms hence becomes evident: it is as if its subject 'imagines' itself within them and can do that because a principle of 'deliberate liberation' [derived] from the norm is taken by him as an immanent principle of self-affirmation [. . .]

Not only do cognitive aspects form the uniqueness of culture, and even more of tradition, but the whole human totality, where an important place and role belong to a peculiar *naturalness* of consciousness. In this sense, the importance of 'transition' states, freed from the most 'socialized' indication of consciousness - its intention - seems to be particularly evident. Within these states a mystery of renovating a culture is hidden.

Another important methodological circumstance can be linked to this later remark. It might look risky to transfer ideas and concepts of social structure and principles of organization from primitive societies and their cultures to contemporary ones. This limitation, however, does not, apparently, relate to 'transition' states. Their existence within any culture is a specific 'effect' of society with respect to the phenomenon of man. [. . .] The presence of such states within all cultures makes them similar to *analytic truths* and places them beyond any specific tradition. All analytical truths ought to be such in all possible worlds. If we consider, therefore, a certain division of culture to be *analytic* (for example, division into norms, values, and ideas), we claim their applicability to all cases. This does not occur, however, in given, empirically graspable traditions: their content is formed by *synthetic truths* (in Kant's terminology). In order to judge the 'non-traditionality' of Western society it seems sufficient to show how admissible it is to regard indications of 'thresholding' states to be its analytic characteristics. [. . .]

'Transitionality' is a very serious stage, and, at the same time, a very concrete, idiosyncratic and historical one. It is quite remarkable that its experiencing does not contain any uncertainty as to what norm, out of two, to choose, which is so characteristic of intercultural marginal personality. There is no norm here, and that is why there is no problem of choice.

An inalienable indication of a 'transition' state is its *detachability*. A detached unit may serve as a sign. This natural characteristic alone can be used by society for its structural reproduction (as well as by a social thinker preoccupied by this problem: Marx, for instance, 'detached', as the proletariat, a social group seen by Heinrich Heine as a continuous stream of 'restless rats'). Detachedness of a human being is normalized as his [her] social position. What rests outside the norm is knowledge of its detachability. Man can perceive this knowledge as a norm, and then his activity acquires a constructive character. He can also perceive it as a value, and then a problem of how to depict it arises. The analytic, i.e., universal, stage is over and a synthetic stage (namely, a search for cultural 'identity' in which the 'individual-ness' of the individual and its detached representativeness becomes clearly seen by the individual) is initiated. When an individual identifies his historical hypostasis with the idea of *organization*, then according to the same universal analytic a normalizing aspect of identification becomes inserted into the structure of social life, and if so, then organization, *as a rule*, starts representing a personality in taking decisions and in detachment in an institutionalized sense. The individual, in the meantime, returns to the hectic pace of an anomalous existence. History is completed for him, since 'transitionality' acquires a status of a social norm shaped as 'preparation to an unknown future'. In that sense preservation of a 'poverty of spirit' appears to be permanent, but an imaginative effect does not accompany this state anymore: it is ensured by a detached organization for this goal. The Western type is transformed into a 'mass' one. An individual can, as was before, change the objects of his imagination, be preoccupied with organizational activity, science, cognition, creation, etc., but this is not important for the social system anymore; it is

not normalized. Personal self-affirmation acquires a character of functional survival. This fact alone is sufficient for the realization that historical consciousness *was* a tradition. All of this can be illustrated in the following scheme:

analytic stage	normative stage	synthetic stage
I	V	I
V		
N	N	N
‘detachment’	‘task’	‘solution’

Similar as to how religion within Western society gradually changed its status from a form of social organization to a form of cultural institution (when Christianity, for instance, successfully overcomes a ‘Hindu’ temptation under Catholicism personified in [legacy of] Eckhart), personality, after a social system becomes able (if not organically, then constructively (I —— N) to function without it, is transformed into a pure value, i.e., enters a hypothetical modality, in the ‘Japanese’ manner:

$$\frac{\text{V —— N}}{\text{I(this is done by society)}}$$

I —— N

The effect of this is quite bizarre: two norms, two cultures, two projections of personal consciousness; this looks like an ontologized ‘schizoid’ effect. Personality no longer knows what it means ‘to identify itself’. A rule of partiality does not apply to it any longer.

It seems most appropriate to clarify this reasoning by using an example of scientific knowledge.

When Augustine tried to distinguish *decibile*, i.e., perception of words by mind, and *dictio*, influence of words to our mind, it was one of the first manifestations of a reverse movement from an ideological-ness of an organized cosmos [developed] by Hellenic consciousness to a natural-ness of a single cognitive act. But if for an axiomatic mind, which transforms spontaneity of phenomena into some regularities, in order to discover a general idea behind the symbolic forms, a contradiction between the uniqueness of experience and accessibility of communication about it is eliminated by the very principle of organization of knowledge into a speculative construction (as it was proved by the Pythagoreans, who, by means of *semiotic* as a system-organizing principle invented by them, underwent an evolution from the immediacy of acoustic experience to the idea of a natural line [of numbers] and created a construct independent from experience, namely, *mathematics*), then for a natural, or more correctly, axiological mind ready to disregard previous experience if it is disproved by the following one, two reflective problems arise immediately: how to analyze natural experience (and ‘personal language’ necessary for its expression), and a common language as means to transfer and to socialize experience. Augustine resolves these problems *integratively* by establishing a unity of experience

based on the principle of will and by interpreting a language for its communication as a denotative one (i.e., as a wordily-subjective), which serves to express someone's wishes. [. . .] This method of using language is based on the assertion of the immediacy of 'I', a speaking person; it serves as a goal of communication in order to establish intersubjectivity, and leads to a formation of that peculiar type of personality which later becomes dominant within European culture. [. . .]

An aspiration to acquire *knowledge* about *such a* subject was first revealed in the philosophy of Nicholas of Cusa, whose aspiration was clearly of an *imaginative* nature. Nicholas not only talks about a 'conscious not-knowing' (ignorance) of dialectical consciousness as initial state of epistemological process; he introduces a notion of 'individual' as a substantive point, which detachability is growing correspondingly to a triumph of a 'conscious not-knowing' of its nature. He strives to *imagine* the identity of individuality in the highest revelation known to him: personified in God. (1) This testifies that individual consciousness for Nicholas Cusanus does not fit any constructed or organized scheme of objective knowledge, since any of its mediated determination cannot reveal a specific nature and value of its subject. Intellect needs, thus, for its self-realization, a conflict of norms and resistance of senses, owing to which its spontaneous actions can be realized. Intellect alone cannot 'think'. From here there is but one step to a Cartesian cognitive estimation: acting intellect reaches unification of the soul by means of a unity of knowledge; this subjective principle of cognition corresponds to a process of individuation of soul. [. . .]

If we conventionally portray subjective intuition of individual scientific knowledge, for instance, a Cartesian 'speculation' (*lumen naturalis*), as a ray coming out from consciousness which grasps in its field of experience a certain 'thing' and then returns to consciousness where, by means of linguistic structures taken from the 'common knowledge', it later constructs its own structure of consciousness as sentences of scientific knowledge, then a process of the structuration of consciousness will be stretched into infinity. But simple grasping of new portions of experience and their naming (under a condition of a limited set of linguistic means, i.e., under social structurationness of 'common sense') will lead to a growing number of linguistic paradoxes. Paradoxicalness can be eliminated only by the specialization of languages of different sciences. What follows is a diminishing level of organization in science in general; this eventually leads scientific knowledge to the edge of senseless and social non-effectiveness. It also leads to an acceleration of non-cognitive efforts to organize the institution of science and to normalize its activity, which, in fact, means the regeneration of the tradition of axiological (valuable in itself) scientific cognition.

The latter can be viewed as a direct consequence of the 'imaginativeness' of personal cognition, which perceives itself as a cognizing consciousness. We already saw, that in the type of tradition *isogeneic* to this one, i.e., in Indian tradition, where knowledge also appears to be immanent to consciousness

(as its 'metaphysical' principle), the activity of consciousness is resolved in a constructive fashion (as a 'normalizing' function) whereas its subject appears to be 'dividual', thematized according to the type of its activity. [. . .]

NOTE

(1) Cassirer, E. *The Individual and the Cosmos in Renaissance Philosophy*. Oxford, 1963, p.39.

NOTES

NOTE ON THINKING AND GROUP ACTIVITY

The essence of group activity is revealed in that the member of a group is, first and foremost, a participant of interdependent situations. He can create the 'I-images' as a result of either a cognitive or emotional blockade of communication and, precisely because of this, he starts to realize that he is an object of a motivational control.

Self-control is an inner acceptance of a role. It conventionalizes behavior and protects it from impulses that lead to unbalanced behavior. Self-control is directly linked to such behavior. The unbalanced behavior could be altered by confronting with a position of a joint activity ascribed to other members of group. In other words, the 'I-role' includes the acceptance of a picture of the world developed by a group. The major functional unit of norm-creation then becomes *meaning* which, after all, appears to be equivalent to an objective norm as an aspect of its inner experience. From a position of the theory of behavior, meaning reveals that an individual is linked to objects. He lives his life surrounded by meanings that are determined by what people do with objects. Meaning, as it seems, has two aspects: first, a characteristic of behavior directed by other members of group to an acting individual (meaning as a 'promise of a certain reaction'), and, second, a specific property of an object (an 'expression of reaction'). However, only within an abstraction of the second aspect, objectified as a sign, can meaning be regarded as a generalization of orientations of co-members of group activity into a norm, which does not depend upon an object of orientation:

$$V \text{——} N$$

A special position is reserved for meanings of *categories*, i.e., for classes of objects and events. Although these meanings can be intentionally posited only by means of evaluative representations, which employ images in an extensional sense, categories of knowledge perform as an independent source of meanings. Categories are generalized forms of assertions about existence and,

in their very organization, carry a trace of intention of a categorizing consciousness. Their 'mythological essence' is hidden not in a content of transferred material, but in their structural organization which appears to be an immediate source of deontic influence occurring within an assimilation of a norm in an aspect of meaning. Every category, thus, represents a meaning or a norm of certain pre-dispositions to action which are clearly organized and established. In his *Elementary Forms of the Religious Life* Durkheim was the first to attempt to generalize this characteristic of categories in a culturological sense, although the original idea belongs to Kant.

A degree of awareness of consciousness in meaning as compared to non-meaningful fragments in a field of experience immediately determines its [meaning's] value. A subjective aspect of meaning is revealed in its expectancy. Expectancy presupposes a symbolic form of the appearance of meaning that makes its social ratification possible. What people see in a certain situation (i.e., grasp as a sign) depends on what they expect to see, while what they expect [to see] is linked to the meanings with which they enter this given situation. The region of perception within group activity should be organized in such way that it allows for the perception of as many signals related to meaningful sentences as possible, and not for reaction to other signals. From here a difference between norm and value within a culture becomes evident. Norm correlates with meaning that is always directed to a subject of group communication, whereas value corresponds to a sign that emanates from such a subject. And even if objective and subjective sides of value are distinguished as well, the latter is always objectified, not in valuable, but in normative aspects [. . .]

Meanings, as well, as norms, are models [patterns] of activity residing in deontic modality. Taken in different situations and determined by social reasons they can be presented either as patterns of potential activity (and can thus be transferred into hypothetic modality) or as patterns of actual activity (and can thus be transferred into apodictic modality). In the first case, they are transformed into signs-values, since value in its essence always presupposes ('hypothesizes') an aspiration to it from a subject, because it can be realized [off-thought objectively] only within such aspiration. In the second case norms-meanings are converted into representations of knowledge.

Human ideas [images] of reality compose an independent projection of a social process. What is called a reality for or by a psychological subject is a certain operative orientation [of actions] to which a high degree of concord exists that should be known to a subject; otherwise, he would not realize [presence of] reality as such.

In an anthropological sense, a symbolic organization of human experience forms a genuine environment of human existence, the since realm of spontaneous perceptions is organized according to configurations of systems of meanings extracted from this environment. From a sociological point of view, culture is a product of symbolic communication. Pictures of the world are organized by means of symbols, and those who master these symbols, acquire a similar image

of this world. Every social world is a cultural region whose borders are determined not by territory or formal membership, but by the limits of effective communications. But in order to become aware of these limits we need certain criteria shaped as regulative ideas of collective consciousness. A goal of traditional philosophy has consisted of working out of the concepts of these ultimate ideas (such was, for instance, Kant's definition of the goal of philosophy). However, these concepts, and methodological conclusions created on the basis of their foundation, always appear to be limited by the reality of [a certain] culture.

NOTE ON TIME AND SPACE

/ . . . / Consciousness and, linked to it, planned behavior is a non-spatial form of behavior connected to an idea of causality and to the placing of an event within time. Consciousness does not have anything as its exterior motif. This is exactly what Kant meant when he called time a condition of an inner experience. Two major conditions of experience - an exterior (space) and an interior (time) - are linked to the two channels or varieties of means of transference of tradition mentioned above. The acoustic channel that permits us to separate and objectify a condition of a subjects is associated with a '*gestalt* of space', whereas an eidetic channel, which does not allow such separation, [is linked] to a '*gestalt* of time', when a subject is not in a position to leave its stream. It seems, then, there is a contradiction here: an eidetic representation is simultaneously posited in space and time, whereas an acoustic, on the contrary, develops in time's succession and is never actually present in all its elements. In fact, everything is contrariwise: in an eidetic representation a sense of correlation between elements and an entity is achieved as the result of a consecutive 'looking round' and a placing its evaluations into a temporal axis. This is why a logical connection is usually associated with a genetic one when notions of cause and action are under scrutiny. Any visual object perceived in its totality cannot be a sign. On the contrary, an idea of the integrity of a fragment of phonation can be achieved only as a result of 'placing' its elements on a non-temporal screen of 'Space' (see the image of eternity in William Blake's interpretation). Quite remarkable seems to be the difference between two types of logical thinking established within two cultures where an acoustic or eidetic type of tradition appeared to be predominant: Indian and Hellenic correspondingly.

Logical thinking developed because of the participation [of individuals] in social groups. Logic combines rules of persuasion, which make thinking more effective. Formal deduction is verification according to conventional categories, i.e., to principles of reference accepted within a certain group. Logical procedures are formed under the influence of group approval or disapproval. Logical thinking is rational because [it is] social.

These general ideas can be presented differently depending on the type of tradition. In the Hellenic case, where group relations are based on transformation V—I, it resulted in the Aristotelian syllogistic; predicates are placed there on the

foundation of a formal gender-specific principle, according to which a particular judgment is subjected to the jurisdiction of a more general one. This presupposes a unity of time with a subject of a judgment, as well as with a reflecting subject which analyses [establishes] this linkage. Such a relation can never be real in a spatial sense, only in a temporal one. For instance, 'horse', 'cock', and 'animal' cannot simultaneously be placed in space, whereas they can in time: e.g., when someone first makes an assertion about animals, and then about horses or cocks. Eidetic Greek thinking is genuinely reflective. Moreover, because it also simultaneously possesses '*gestalt* of time', nothing can prevent a Platonic eidetic hierarchy, where a relation of particular and general is not distinguished from a relation of cause and effect, from transforming into a foundation of a theory of formal deduction. Contrariwise, in India, where thinking is not reflective (because it is not subjective) but constructive, a development of logical form is slowed down, since additional efforts to place judgments in a system of successive elements not connected by a factor of time become necessary. This logic, however, is then formalized in terms of real relations of things, which correspond to a normative function of knowledge in group activity: I—N. In this case, thinking does not represent by itself imaginative repetitions of choice of possible behavior in a situation of valuation. Consciousness, which produces normative meanings, is perfectly aware that they are norms and meanings for others, not for consciousness itself. That is why ideas are perceived as quite externalized and penetrating symbols, fully equivalent to auxiliary images of evaluative judgments. Indian traditionalism is distinguished precisely by the ability to analyze its own thinking, an activity of the human mind as a symbol of something transcendental to it. Since the ability for symbolic communication arises in organized groups, consciousness and reflection [become] objects of social control. Within a communicative process, however, symbols of the objects of communication represent not a subject himself, but a non-personified cognitive function; [it happens] because thinking does not belong [fully and only] to an individual. Means of its control serve a functional requirement in order to produce norms to others. Thus, the cognitive function of the Brahmans consists in ensuring the means of symbolic organization of the social relations for other caste groups.

A case in point is when thinking is regarded as an individual source of evaluative judgments. Its effectiveness is then determined extensively, i.e., by a quantity of ideas produced by this individual thinking. Then logic and scientific method here appear as forms of a refined behavior typical for unforeseen cases, because an evaluative orientation is always realized in hypothetic modality; i.e., is oriented towards the future, where interruptions within group activity and difficulties in communication are quite possible. In fact, hypothetization and evaluative choice themselves become an interruption in such activity, i.e., thinking of the type V—I becomes a problem for itself. This incomplete revelation forces such thinking to subjectively (in time) 'off-live' the very process of deduction and to introduce a category of causality, i.e., to manipulate by motivation.

Scientific thinking based on individual evaluative choice, follows the same patter as a person solving a practical task; but here an auxiliary demand to formalize a method appears, because science is not [just] thinking, but a normativized group activity.

Ancient thought appeared to be unable to overcome this dilemma since a notion of norm was alien to the axiology of its consciousness. It is precisely this [circumstance] that attached temporality to scientific research there, and the very experience was perceived as non-reliable: indeed, its source appeared to be an axiomatic judgment, hypothesis. The only means of control became the rules of formal logic, according to which varieties of axioms without sufficient foundation were placed under types of ideas:

V —— I

I —— V.

In the Indian case thinking is not linked to motivation and rationalization: symbols here are revealed in behavior, and thinking performs as a form of behavior of a part of elements of a social group bearing regulative functions within this group. Every person here becomes an organized system of meanings, but these meanings are determined for him [her] only with respect to Brahmans for whom thinking is equivalent to a norm of non-reflective behavior: experience and skill. An ideal of consciousness, thus, represents its approximation to naturalness of habitual (patternalized) behavior, and models of such consciousness are symbolic patterns of the group activity as such. Consciousness does not produce them, but constructs them, i.e., does not perform according to motives, but to a plan, which is stored in a body of tradition. Thus, an object of immediate perception does not become a motif of behavior, but a social function, and an analysis of consciousness is equivalent to a sociological research, as it is characteristic for a final-traditionalistic society where psychological, anthropological, and culturological plans [of analysis] are combined: psychic is quite symbolic; individual is quite cultural; and culture [is quite] anthropomorphic (i.e., functional as an organism).

A NOTE ON WRITTEN AND ORAL COMMUNICATION

One of the major areas where social-psychological analysis can shed light on the mysteries of the origin of tradition is in the opposition of written and oral ways of communication. The link of writing to tradition, in particular, to a 'big' tradition should become an object of special investigation, since within contemporary anthropology notions of 'traditional' and 'pre-written' societies are practically considered equivalent. However, the advantages of a *vocal* communication that consist of a virtually unlimited multitude of oral combinations produced by a limited number of muscles, possibilities to manipulate speech which differs it from a visual channel, and, finally, a reliable control based on hearing-oneself-speak which facilitates self-objectification (hardly possible for visual representations; a 'point of view' is not a 'point of hearing' when an identification with a subject [not with a tradition] is concerned) - all this facilitates developing the acoustic culture within all levels of tradition. The best example for this can be found in Indian civilization with its high level of abstract thinking; self-alienation of personality; de-personalization of social role and status; thematic communication as a genuine subject of cognition; and other consequences of evolution of oral forms of communication linked, as it seems, to specific channels of transference of Brahmanic charisma. Using this example one can assert that the transformation of knowledge into norms achieved by means of eliminating value's representations [valuable components] from consciousness is definitely linked to the oral channel of transference of tradition. On the contrary, Chinese culture, where norms are transformed into values (i.e., into signs that are visible most of the time), and abstract knowledge complexes not really developed, is linked to a development of ideograms and to writing as the major conventional form of social interaction (for instance, as an indicator of prestige and means of distributing social status, etc.) [. . .] According to the same principle, Indian culture can be regarded a conceptual one, whereas Chinese an intuitive one [. . .] It is important to note that even such a significant characteristic as an attitude to time (presence or absence of the '*gestalt* of time', according to an expression of Margaret Mead) is connected to appealing predominantly to an acoustic or eidetic channel of tradition. Cultures of an eidetic type are more historical in their consciousness [self-reflection]. Again, [we can find] quite vivid examples: a complete non-historicity of Indian self-consciousness and a hypertrophied historicity of Chinese self-consciousness. This seems to be connected, first of all, to a level of ease in detaching an individual from himself as [from someone who is] immediately living through a temporal process. Human society is always a communication in progress, a number of events, stream of living interaction between people. If an individual possesses a consciousness of himself [his self-realization], and this consciousness for him

becomes an objective principle in such stream, then it is not a world that seems to be changing, but rather his ideas about this world. In addition, notions such as 'culture', 'social structure', etc., are perceived not as realities, but as abstractions which describe an uninterrupted activity in a stream of becoming. Declaring that these model representations are *causes* of behavior and subjective principles is to commit a logical mistake. These notions are no more than magic symbols that replace individuals who ought to participate in a certain coordinated action. Such coordination becomes possible only because of the presence of certain types of behavior based on objective principles; these principles give individuals the possibility to maintain a certain system of mutual support. Such could be the reasoning of an adherent of Confucianism for whom cognitive thinking acquires the form of a concrete process of thought reflected in eidetic images. Incidentally, the emergence of Buddhism in India was closely connected to writing. Moreover, the first attempts at the written codification of traditional literature were undertaken by Buddhists [. . .] In its imaginative revelation, phenomenology of Buddhism consists of a system of religious symbols: thus, ethical rules of early teaching and the canon of the *Hināyāna* were 'clarified' by means of the *Mahāyāna* that appeared much later. Owing to this, norms were perceived as subjective values. In Hinduism, contrariwise, a predominance of acoustic channels provided the possibility of knowledge (i.e., an apodictic modality of communication) to be transformed into a norm, i.e., a deontic modality, because this process is by no means linked to the personification and procedure of the evaluation inherent to it. Fifteen centuries of a struggle between two traditions was crowned by a victory of a more integrative one, i.e., of an acoustic tradition [of Hinduism], and Buddhism was expelled from India.

APPENDIX 1

THEORIES OF ANALOGY, WESTERN AND INDIAN (1)

Tropically speaking, analogy can be called both a foster parent and a bastard child of philosophy. Almost all of what is substantial in philosophical reasoning is woven of various analogies and similes. By the chain of analogy philosophy is bound to a theology - and the same matter makes bridges from it into the theory of literature and art. When taken in the historical and comparative-cultural perspective, it is not difficult to notice that the flesh of analogies is lost in the shifts between different historical epochs and cultures, and that what remains is a thin skeleton of 'universal' logical truths and deductive structures. Both in theology of revelation and in modern philosophy of science Analogy is considered as the only, more or less rational, mechanism of discovery and cumulative growth of knowledge. In phenomenology, theory of communication and semiotics, Analogy is widely used and sometimes misused [. . .] This nomenclature of references can be easily extended. It looks even more antithetical because since Aristotle, little has been added to our knowledge of the logical structure of the inference by analogy, and despite the availability of a rich collection of instances and ways of analogizing in the above-mentioned domains of science and humanities, we are still lack a comprehensive systematization and description of the general principles of the analogy mechanism.

The proposed course of lectures is devised as an attempt to fill the gap, at least to some degree. It consists of two essentially independent parts, dealing with Western and Indian theories of analogy correspondingly. Such a composition is conducive but not exclusively to comparison. In Indian philosophical tradition, analogy was often treated with more prominence and attention, and so very promising approaches were demonstrated. Although the patent intention of the course is to universally interpret analogy as a transgressive (i.e., deductively non-justifiable) transfer of elements, or/and properties, or/and relations of the model onto the prototype, it became impossible to follow this principle in all the cases found in Indian and Western traditions. So far it seems advisable to keep them apart.

The course is organized in a form of twelve or eighteen lectures and its exposition follows the scheme attached below.

(1) Analogy in Ancient Greek Philosophy;
(2) Theological Approaches to Analogy;
(3) Analogy in Modern Philosophy of Science;
(4) Analogy as a Foundation of the Philosophical System: an Indian View;
(5) Analogy as Experience and Analogy as Communication (Transphilosophical Outfits of the Notion);
(6) Similarities and Differences in Western and Indian Uses of Analogy.

TABLE OF CONTENTS FOR THE COURSE (2)

PART II. *Modeling Analogues in Philosophy of Science*
- I. Classificative Analogies
- II. 'Strict Modeling' Analogy by Rutkovsky
- III. 'Typological Analogy'
- IV. Extra- and Intrapolational Analogy
- V. Analogy of Subordination
- VI. 'Causal Analogy' in the Methodology of Scientific Inquiry
- VII. 'Functional Analogy'
- VIII. Kuhn's Paradigmatics
- IX. 'General Systems' Approach to Analogy

PART III. *Phenomenological Interpretations of Analogy*
- I. Cartesian Tradition [and Analogy]
- II. [Analogy] from Kant to Hegel
- III. Marxist Phenomenology: The Idea of 'Form Transformed'
- IV. Brentano and Early Husserl [and Analogy]
- V. Older Husserl and Heidegger [and Analogy]
- VI. Modern Semiotics and Philosophy of Communication [and Analogy]

CHAPTER II. INDIAN APPROACHES TO ANALOGY

PART I. *Logical Theories of the Structure of Analogical Inference*
- I. *Analogy in Classical Indian Culture and Religion*
  - I. *The* Sūtras *Period*:
    1. Analogous Reasoning in Philosophical Disputes
       - A. False Analogies (*Jāti*) as Stratagems of Typical Discussions and Their Epitomizing in *The Nyā ya-Sūtra*
       - B. The Early Jain Theory of Probabilism (*Syād*-*vāda*)
    2. Gautama: The Analogous Example (*Dṛṣṭānta*) in the Structure of Logical Inference
    3. Buddhist Criticism of Analogy as a Valid Means of Knowledge
    4. Deductive Concepts of Analogy in *Mīmāṃsā* and *Saṁkhyā*
    5. Inductive Concepts of Analogy in *Vedānta*
    6. Analogy as Proportion in Ramanuja's *Vedānta*
  - II. *The Period of Commentaries and Treatises:*
    1. Identification of Deduction with Analogy
       - A. *Kumārīla Bhaṭta*
       - B. *Prabhārata*

2. Identification of Induction with Analogy
   A. *Mallisenasuri*
3. Identification of Perception with Analogy
   A. Śaṅkarā
   B. *Sureśvara*
   C. Vacaspati Miśra
4. Identification of Testimony with Analogy
   A. Bhartṛhari

III. *GaṅgesāOn Submeasuring, or Summa Analogiae*
1. Criticism of the 'Paradigmatic' Interpretation of Analogy
2. Criticism of the 'Proportional' and 'Relativistic' Interpretations of Analogy
3. Criticism of the View of Analogy as a Combined Means of Valid Knowledge
4. Theory of the 'Reciprocal' and 'Non-Reciprocal' Submeasuring

PART II. *Analogies as System-Building Models*

I. *Vacaspati's Version of the Khyāti-Vāda ('the Way of Saying')*

II. *The Family of Hindu Philosophies as a Set of Basic Analogies*
1. *Vedānta*: 'Thought as Action'
2. *Mīmāṃsā*: 'Action as Thought'
3. *Nyāya*: 'Word as Thought'
4. *Vaiśeṣikā*: 'Thought as Word'
5. *Saṁkhyā*: 'Action as Word'
6. *Yoga*: 'Word as Action'

PART III. *Phenomenological Interpretations of Analogy*

I. *Buddhist 'Semiological' Approaches*

II. *'Thematic Intersubjectivity' in the Navya-Nyāya Scheme*

CONCLUSION. Where and Whether Westerners and Indians Come Together?

EDITORIAL NOTES TO APPENDIX 1

(1) This Syllabus was prepared by Zilberman for the Spring 1976 Semester's course at Brandeis University (HIDEA 132b).

(2) This Table of Contents bears no similarity to the content of Zilberman's book on Analogy. It is difficult to say whether Zilberman intended this table of contents to be a foundation of his Analogy book or just regarded it as a helpful introduction to the entire problematic of analogy.

APPENDIX 2

DESCRIPTION OF THE PROJECT (FOR THE INDIAN FELLOWSHIP) (1)

The main objective of the plan for the period for which the Fellowship is requested is to bring together different pieces and aspects of my preceding research and to write a book, *Analogy in Western and Indian Philosophical Thought*. The book will consist of two parts, the first being a propaedeutic to the second. In the first part (about 250 typed pages), various Western and Indian approaches to analogy will be compared. The second part (also 250 typed pages) will contain a translation, from Sanskrit, and an analysis of *The Upamāna-Kāṇḍa*, and a section on analogy from Gaṇgeśopadhyayàs *The Tattvacintāmaṇi* with Vidyāvagiṣàs *Commentary*.

The purpose of the research is to find out why analogy, though always considered a major theme of philosophy and the only real source of epistemologically augmenting knowledge, still remains untamed and why it provokes controversial assessments in modern Western philosophical and scientific thought. In this connection, the acumen and originality of Gaṇgeśa's treatment of the subject are advantageously contrasting.

The development of the views on analogy in the West is traced from the pre-Socratics, Plato, Aristotle, Galen, Th.Aquinas, Gaetan, F.Bacon, Leibniz, Kant, Hegel, J.St.Mill, St.Jevons, W.Wundt, H.Spencer, E.Mach, and N.Lossky to modern authors like De Solages, Dorolle, Perelman, Th.Kuhn and other representatives of the philosophy of science. This is done to encompass all available attempts of the formal logical treatment of Analogy. Its psychological and phenomenological interpretations are studied on the basis of the Cartesian tradition, Husserl's phenomenology, modern semiotics, symbolic anthropology and linguistics.

For the Indian part, the discussion encompasses a few relevant topics from *The Nyāya-Sūtra* and *The Bhāṣya* (*upamāna* as one of the four epistemological categories or sources of right knowledge; the role of 'example' (*dṛṣṭānta*) in the structure of logical inference; false analogies (*jāti*) and their import for the methodology of dispute; and the problem of doubt (*samśaya*), association by

memory, and types of superimposition (*adhyāsa*). This is followed by an analysis of Buddhist criticism of Analogy as a valid means of knowledge; of the *Vedāntins*; of the doctrine of the dialectical superimposition (*adhyāropa-apavāda*); of the 'modes of saying' (*khyāti-vāda*); and of the relevant views of the *Mīmāṃsākas*, the *Vaiśeṣikās*, the *Saṁkhyāikas*, and the Jainas concerning 'similarity' as an epistemological category (*sādṛśya-pramāṇyam*). The subsuming theory of Gaṇgeśa is then explained. First its exposition includes a clarification of analogy as 'interlocked' with other epistemological categories, so that any attempt at its separate formalization and reduction to psychological perceptive association, deduction, induction, and semantic 'language games' (i.e., in practically all ways in which Western philosophers tried to deal with analogy) is proved unwarranted. On the other hand, Gaṇgeśàs interpretation of analogy as an indivisible and non-confluent totality of all ingredient epistemic means makes Analogy promptly explainable in terms of a Systems Approach.

Complex relations between analogy and metaphor, as treated by Gaṇgésa, are discussed next, with the relevance of this topic for semantics being evinced.

The semiotic aspects of Gaṇgeśa's approach are presented in the context of the typology of signs (*vyanijaka*, *lakṣaṇā, nimitta*) used in the process of making analogy a workable source of knowledge.

Further, it is demonstrated that, according to Gaṇgésa, the structure of inference by analogy cannot be formalized because it has three different levels: the objective one consisting of logical relations (of generalization, specification, and subordination, etc.) between the items of comparison; the level of communication between the 'informer' and 'informed', involving important issues of general linguistics and semiotics; and the level of interaction, with the 'dividual' subject of knowledge by analogy, requiring two separate social roles of the teacher and the pupil who perform different, though reciprocal, epistemic acts of intimation of the verbal testimony, its actualization in the perceptive experience, and the reciprocate operation (*vyāpara*) as a 'socialized' aspect of the reflective analogous appresentation (*atideṣavakyānuvyavasāya*). The third level is exceptionally interesting and important from the point of view of the sociology of knowledge. From this vantage point, analogy can be further explained as a 'seed' (*bīja*), a structural unit of the Indian tradition of learning, a kind of 'genetic code' of all basic types of Indian philosophy, and, consequently, one of the most important cultural mechanisms.

All these facets of analogy are discussed alongside the necessary textological commentaries and against the background of the typical technical terminology and formal procedures of the *Navya Nyāya* logic. (2)

[. . .] Apart from discussing these and some other related issues with the specialists in *Nyāya*, there is another purpose of the planned research in India. It can be briefly described as connected with the phenomenological and sociological aspects of the problem of analogy. It is well known that all attempts at the logical formalization of analogy in the Western philosophical tradition have been unsuccessful. Nevertheless, analogy cannot be neglected, as it is virtually

the only real mechanism of scientific discovery. As it is shown by recent investigations in the philosophy of science and the phenomenology of communication, these failures are explainable in view of the particular composition of analogy as a peculiar epistemic construction which, in its turn, allows for the presentation of the genesis of logical form in quite a new light. All these very interesting issues are easily discernible in Gaṇgeśa's treatment of analogy. According to this interpretation, the structure of logical inference by analogy is not formalizable because it comprises three different levels of content: the logical one consisting of a formal means (such as generalization, formalization, subordination, etc.) of establishing relations between compared objects; the level of communication between the 'informer' and the 'informed', involving important issues of the general linguistic and semiotic concern; and the level of interaction, with the 'dividual' subject who produced the knowledge by analogy. This requires two separate social roles of the teacher and the pupil who perform different epistemic acts, corresponding to the objective components of the 'system' of the inference by analogy. Such are epistemic acts of intimation of the verbal testimony, its actualization in the perceptive experience, and the reciprocative operation with both in the 'socialized' aspect of the reflective analogous presentation. The third level is exceptionally interesting and important from the point of view of the sociology of knowledge and philosophy of science (comparable to the treatment of the paradigm' and 'analogous' in Thomas Kuhn, *The Structure of Scientific Revolutions*, University of Chicago Press, 1970, 2nd edition). From this vantage point, Analogy can be further interpreted as a 'seed' (*vāsanā*): the structural unit of the specifically Indian tradition of learning, cognate to some basic principles of Indian social organization (e.g., the 'dividual' subject as the philosophical principle of the 'caste consciousness'). It can be also presented as a 'genetic code' of the basic types of Indian philosophy, and, consequently, as an important means of interpretation of all Indian culture. In preliminary form, this was done by the applicant in the series of lectures given at the University of Chicago in 1974. To substantiate his point, however, specially organized interviews with Indian scholars are needed. These interviews are designed with the purpose of singling out the above-mentioned aspects of Indian philosophical thought. The information obtained will be laid down as the foundation of another book of the applicant that he plans to start after finishing his research in India. (3)

EDITORIAL NOTES TO APPENDIX 2

(1) This piece was written by Zilberman probably in the beginning of 1977 when he applied for a Smithsonian Fellowship to India. He was granted this Fellowship which would have started in September 1977, but could not make it because of his death in July of 1977.

(2) What is placed after this fragment is the only surviving part of another version of the text.

(3) It now appears impossible to identify which book Zilberman planned at that time.

APPENDIX 3

EXCERPTS FROM A SCIENTIFIC CAREER ACCOUNT (1)

Analogy always was and still is a cardinal, though most difficult and unyielding theme of philosophy, both Indian and Western. It can be described as the central problem of the modern philosophy of science, linguistics, and phenomenology. Interesting approaches to this problem are also found in the Indian philosophical tradition. To prove their relevancy, I performed a comparative study of Western and Indian theories of analogy from the epistemological, logical, phenomenological, and sociological perspectives. I also translated (into Russian) a treatise on Analogy, *The Upamāna-Kāṇḍa* (a part of the *Tattvacintāmaṇi* tetralogy) by the great Indian logician Gaṇgeśopadhyaya. My investigation of the subject resulted in a series of papers and a monograph, which, unfortunately, I was unable to publish in the Soviet Union [. . .] At present I am finishing the English version of Gaṇgeśa's treatise and substantially re-writing the monograph on analogy.

EDITORIAL NOTES TO APPENDIX 3

(1) This piece can be attributed as written somewhere in between 1975 and 1977.

APPENDIX 4

SYLLABUS: 'HINDU SYSTEMS OF THOUGHT: A CULTURAL APPROACH' (1)

Methodological Introduction: The Family Systems of Thought as a 'Summa Metaphysicorum'

1. The ways of comparative philosophy. What is special about the 'cultural' approach to systems of thought. The method of 'semantic anthropology'.
2. The inner organization of the Indian Mind: what is mystical and what is mystifying about it? The 'family of philosophical systems' and caste transactions. 'Closed' and 'open' philosophical universes of discourse.
3. The tradition of knowledge in India. 'Intellectualism' as a profession. The Authoritative Text and Culture, or the necessity of cognized freedom. Why Indian systems of thought are more accomplished and more 'professional than any other of their counterparts in the West.

(1) Vedānta: Thought as Action

1. *Vedānta* as the mechanics of revelation in the authoritative text.
2. *Vedānta* as the tradition of knowledge and the Universe as an assemblage of its contextual meanings. 'Nescience' (*avidyā*) and 'transcendental illusion' (*māyā*).
3. Indian 'intellectualism' and Western 'rationalism' contrasted. *Vedānta* and the modern methodology of science. The 'frustrative' strategy of inhibition of scientific thought in India.
4. The 'dividual' personality. The three *Vedāntas*: intellectualism against personalism and emotivism. The common fate of the devotional and reformist movement in India. Why Indian civilization cannot be modernized.

Assignment: The Indian idea of Authority as a Non-Coercive Action.

(2) Mīmāṃsā: Action as Thought

1. Ideology and power in the cross-cultural perspective. The meaning of orthopraxy. Thinking as ritual (Hegel and *Mīmāṃsā*).

2. Tradition as a mental action. Authoritative texts as a tool of control. Logical semantics and social action.
3. The way of force and integration by the destruction of dualities in culture and personality. The metaphysics of supra-realism and theories of symbolic exchange.
4. On the equifinality of civilizations. The social institution as a criterion of truth and reality (Durkheim and *Śabra* compared). Anti-psychologism as a religious creed (Kumarila and Tertullian compared).

Assignment: The cultural action of power as a substance of the individual's rational thought.

(3) Nyāya: Word as Thought

1. Structure of society, language, and communication: Indian philosophy of language as social philosophy.
2. What makes tradition self-identical, or logical procedures as rules of the game between the individual and society. Logical functions of veracity as measures of social functionality.
3. Knowledge as a cultural value: a distinctive quality of Indian civilization. Semantic and symbolic functions of signs: Indian and Western views counterrelated.
4. The existence of God can be proven; the existence of Man - cannot.

Assignment: Should we take the Indian solution as the best possible for the equation: 'the social = the individual'?

(4) Vaiśeṣikā: Thought as Word

1. The tradition of empiricism in India and in the West. Substances and codes.
2. Ancient Indian medical thought and caste professional interest.
3. Nature as an artefact. Speculative (significational) and experimental (operative) physics. Do Indians really lack the idea of History?
4. The force of physical and poetical imagination (*Vaiśeṣikā* and *Vaiṣṇavism*).

Assignment: Why should speculative empiricism imitate natural philosophy?

(5) Saṁkhyā: Action an Word

1. Indian psychology of self-realization and modern psychoanalysis. Reincarnation as a physic process and ethical code.
2. Indian psychology and theory of dramatic performance. Culture as a performance. The idea of play.
3. The Void as a 'primordial' state of social, personal, and mental affairs. The structure of consciousness and the after-death states.
4. The 'creative personality' in India and in the West. The problem of cultural borrowing from India and the psychology of acculturalism in India.

Assignment: Do we feel 'naturally' or just call something 'natural'?

(6) Yoga: Word as Action

1. The *yogic* substantiation of consciousness -an Indian ‘pragmatism’?
2. *Yogic* ‘intersubjectivity’. Indian mysticism and its religious sects as illustrations. Yoga and the ‘mass consciousness’.
3. Cross-cultural *yoga*: a common substrate of borrowing.
4. The *yogin* as a ‘cultural’ and ‘anti-cultural’ hero.

Assignment: What is the difference between the yogic and Descartes’ intuition?

EDITORIAL NOTES TO APPENDIX 4

(1) This Syllabus was prepared for the 1975 Fall Semester’s course at Brandeis University (HIDEA 136b).

APPENDIX 5

KARMA-MĪMĀṂSĀ: AN ACTIVE MENSURATION

This is the name of one of six possible onlookings (*darśanas*) of the *Veda*. Its literal translation offers a simple alternative: '*karma,*' a 'ritual action', and *mīmāṃsā*, 'mensuration'. The term can consequently be translated as 'mensuration of action', OR 'active mensuration'. This 'OR' is semantically unavoidable, i.e., cannot be dispensed when the Sanskrit language is used as a means of expression. Therefore, *Mīmāṃsā* imposes a special prohibition of literal (etymological) interpretations.

Its imposition is irrelevant here, however, because what follows is not an interpretation of *Mīmāṃsā*. Our intention is to interpret *Mīmāṃsā* as a mode of intellectual activity that is ambiguous and somehow alien. Introducing *Mīmāṃsā* is a better name for our purposes. Of course, quite a few authors tried to introduce this system before, and it is not in my plans to question their efforts. First of all, because my ends are quite different. They attempt to give the reader a chance to learn *Mīmāṃsā* in a general fashion while my purpose is to expose the reader to the method of *Mīmāṃsā*, regardless what gains in knowing *Mīmāṃsā* it would bring.

Thus my 'introduction' of *Mīmāṃsā* is a methodological experiment. As in any experiment, furthermore, a positive outcome is expected. This will lead to a better understanding, in the sidelight of *Mīmāṃsā*, of how Hegel's dialectical thinking could be produced and what underlies the later dissent of analytical and linguistic philosophy from this thinking. It goes without saying that in the proposed methodology neither the historical circumstances nor the expressed and recorded motivations and arguments of the dissenters hold any relevancy. First, because what is questioned here is not what the Hegelian dialectical thinking is, but how it could be produced, according to the method of *Mīmāṃsā*. This thinking is, somewhat oddly, 'existentialized' and, therefore, cannot be approached, from any deviating position whatsoever, as a concept. It is not stated here that *Mīmāṃsā* is a variety of 'dialectics'. This means that we have nothing to do with the problems of language and meaning in its behalf. Second, *Mīmāṃsā*, in its proper sense, is not an analytical or linguistic philosophy

either, so it would be meaningless to wonder what its attitude to the dialectical method would be, compared to those of the genuine logical analysts and philosophers of language. Hence our way should be rightly labeled as that of 'disparative' philosophy, rather than 'comparative' philosophy.

It is also called *Pūrva-Mīmāṃsā*: the 'Prime Mensuration'. Here it turns up, as it were by itself: "The Act existed in the very beginning . . ." Nothing of the sort. There is neither beginning, nor end in *Mīmāṃsā*. Could it then be that the 'Immutable One Being' of Parmenides (*to hen on*) is what is measured in *Mīmāṃsā*? No, *Mīmāṃsā* does not include a single *ontological* statement. It is not about 'being', it is about 'what ought to be'. That is, it is about what Plato obscurely (1) taught in his *Laws*. If we are indeed 'God's puppets', our reality is 'ought-to-being', not 'being'. But we are not in a position to *know* this reality. Let *Mīmāṃsā*, therefore, teach us. As for its 'primarity', it is prior to the 'second' or 'upper' (*Uttara*) *Mīmāṃsā*, i.e., *Vedānta*, 'The Crown of the *Veda*'.

Mīmāṃsā makes the Western mind nauseous, and hardly a few understand what it is for. *Mīmāṃsā* represents a ritual dimension of the *Veda*. It is profoundly non-human and godless. It is "Not Ritual for Man, but Man for Ritual"; "Not Ritual for God but God for Ritual", and even, "Not Ritual for the *Veda* but the *Veda* for Ritual". The *Veda* is studied to make Ritual performance possible. "Let everybody, who desires heaven, sacrifice". What is meant is not the freedom of will and desire, however. Man is born to desire heaven and, therefore, to perform rituals. The man must be right ("that same"), the action must be undeviantly regulated, and the sacrifice must be "of that very kind". That is all *Mīmāṃsā*. However, what kind of 'onlooking' of an object (i.e., the *Veda*) takes place, if the object is also 'summoned' to be 'onlooked'? Modern semantics offers a simple explanation: the *Mīmāṃsākas* equate *'object'* with *'meaning'*. The *Veda* is not an object but, rather, a meaning of the object, i.e., the *sense*. And it is so just because *Mīmāṃsā* is busy not with the *Veda* but with 'the-*Veda*-for-Ritual'.

Mīmāṃsā is 'onlooking' but not speculation, being, or consciousness. However, it teaches what ought to be cognized. This means that we must start from here as soon as we finish our preliminary remarks. Modern scholars 'discovered' in *Mīmāṃsā* the 'elements' of quite a few philosophical disciplines: semantics, linguistics, normative ethics, sociology, ontology, logic, epistemology. Let us try to forget all those 'discoveries'.

The *Vedic* 'onlookings' (or 'beholdings') are still used as Pandora's vessels by the Western mentality, so that this latter can easily take out of them what was actually never put there. Two hundred years of acquaintance are strewn thickly with 'interpretive constructions' made of the customary philosophical parlance.

If so, then it is more advisable to treat *Mīmāṃsā* as a 'non-philosophy'. First of all, it is unique. No other culture can boast of something that even slightly resembles *Mīmāṃsā*. It is a product of priestly thought; it cannot have any implied meaning; and it hardly needs any further interpretation in the manner of Western logic and semantics. We may just follow its ways, in order to understand what it actually means to be 'meaning', or 'sense-object', or any other

'element' of ritual exegesis. The only condition of following this is to develop its peculiar 'ought-to-be' awareness; otherwise, isolated 'elements' with spurious Western connotations would remain instead of the system.

We shall start from the 'root' text of *Mīmāṃsā*. *The Jaiminin-Sūtras* (4th century B.C. – 2nd century. A.D.), and conclude with Apadeva's *Mīmāṃsā-Nyāya-Prakāśa* (17th century A.D.). They are divided by 2,000 years of not development but preservation; they intend to keep original position of the 'Ritual onlooking'. (2)

(1) Plato's teaching is called 'obscure' because his mentalistic practice in *Laws* contradicts his basic theoretical assertions formulated elsewhere. As for these latter, a slight interference with the *Mīmāṃsā* problematic can be discovered in his dialogue *Cratylos*. It is, perhaps, no coincidence that Platonists claim that this dialogue is 'poorly intelligible', 'inconsistent', 'distorted', and 'strange'. Its main theme is about the interrelations between 'thing', 'idea', 'type', and 'name'. Of course, ritual is never mentioned. In fact, it has never been intended for mentioning. But the problem of *'nomothesis'* (i.e., 'name-allotment', *nāmadheya*) is important in both cases. Strangely enough Plato, although aware that 'name-allotment' (or 'name-imparting') is an act, starts his analysis of 'nomothesis' from the lowest resultant level; i.e., from 'name' itself. (In *Mīmāṃsā* action is never lost sight of in the whole philosophical process). This decision gets him involved in a series of false problems of 'name conventionality' and of 'relativity of name usage', as connected with knowledge. In other words, his is an attempt at a *naturalistic* analysis of the significant act of name-giving and of the communicative functions of the word. His *Cratylos* also contains an elementary and not very clearly introduced 'phenomenology' of the 'signification/significance' (i.e., 'name-and-meaning') relations. Having started with names, Plato finds himself dragged into the inductive process, furthermore, he is aware of various naturalistic reductions and cannot attain certainty in his formulations. The movement of his thought is brilliantly illustrated in his *7th Epistle*, where "three steps of Knowing, Knowledge and Being" are considered.

BEING

KNOWLEDGE

IMAGE

DEFINITION

NAME

('knowing') ('Idea as identity of Knowledge and Being')

There are four breaks in the process of going from Name to Being. To fill them, 'sign leaps' are required. As all the means of cognition are exhausted in Knowledge, furthermore, Knowledge and Being cannot be interconnected by a sign; therefore, they are arbitrarily proclaimed identical (what is called 'philosophical idealism' and can be easily traced back to the cultural break in oral tradition, with the emergence of literacy. See Plato's *Timaus*).

In *Mīmāṃsā*, the direction of movement is just the opposite, so 'action' rightly takes the place of Plato's 'Being' and permeats all the descending levels. What is more important is that not only the direction, but the modality of thinking is changed. According to Plato, 'knowledge' is associated with 'being' through *'understanding'* ('Knowledge' is apodictic; 'Being' is deontic, as a naturalized identity of 'Knowledge'). According to *Mīmāṃsā*, the deontic action ('command') sets down demonstrability (apodicticity) of knowledge, as of a *part* of the process of activity. Its 'partiality' allows it to join the process of signification and to subsequently transform the 'ideal' (i.e., non-active) theoretical knowledge, with the logical procedure of definition that, in its turn, would require *nominal* units for its final expression.

(2) Zilberman's manuscript abruptly ends here.

APPENDIX 6

ANALOGY IN *PRACHINA-NYĀYA*

Isolated references to *upamāna* (likening to a model, or recognizing according to a paradigm) can be encountered already in the period preceding appearance of *The Nyāya-Sūtra* (i.e., approximately from the middle of the 7th century B.C. to 2nd century A.D.), when rules for conducting a discussion, achieving trustworthy knowledge and examining its correctness were developed.

The sage Aṣtavakra is mentioned in *Mahābhārata* (*Vanaparva*, Ch.132-134). The time of his life is approximately a second third of the 6th century B.C. An indispensable part of any dispute organized at that time in rajah's palaces was to answer riddles and guess conundrums.

"Janaka, the King of Mithila, in order to verify a quick-wittedness of Aṣtavakra, once delivered the following speech:

- Only that [person] can be regarded as a sage who recognize:

What has 360 spokes, 12 parts, with 30 details in each of them, and 24 joints (i.e., 360 days, 12 months, with 30 days in each of them, and 24 full moons and new moons).

Aṣtavakra, having fully understood meaning of a *likened*, answered: "Let an eternally moving wheel (i.e., Sun), which has 24 joints, 6 hubs (i.e., seasons, according to Indian calendar), 12 rims (i.e., signs of Zodiac, or months), and 350 spokes (i.e., degrees, or days) protect you!"

Janaka asked: "Who are the two Gods *likened* to two horses harnessed into a chariot, always inseparable, always impetuous as falcons?"

Aṣtavakra answered: "Let God protect you, King, from appearance of these two (lightening and thunder are implied) in your house -let they come into a house of your enemy. They belong to that [being] which coachman is a wind (i.e., to a cloud)."

After that King asked again: "Who does not close its eyes even when it sleeps? What is immobile even when it is being born? What does not have a heart? And what does leave behind even itself?"

Aṣtavakra answered: "A fish does not close its eyes even when it sleeps; an egg is born immobile; a stone does not have a heart; and a river leaves itself behind."

The King, astonished by the quick-wittedness of Aṣṭavakra, was silent for a moment and then exclaimed:

"Oh, you, who possesses divine omnipotence, are you a man [or a God]?"

Similes were quite often multi-staged in discussions between equal disputants. Quick-wittedness was determined by a necessity to escape an immediate demonstration of an implied object (which was frequently connected to sacral reasons). A disputant who was unable to continue a chain of similarities and was thus forced to indicate an object directly (i.e., to abandon or change a *criterion* of cognition) was declared defeated.

/*Vidyābhuṣana*, 16/

However, at that time the notion *upamāna* does not seem to have any special sense. Moreover, there were not even any attempts to define it. In a strictly terminological sense it was first used in *Artha-Śāstra*, a political-economic tractate by Kautilya (about 327 B.C.) In his last chapter, Kautilya reproduces a list of 32 special terms, the so-called *'Tantra-Yukti'*, or 'Forms of Scientific Argumentation'. This list then has been repeated, in its most important details, in *Charaka-Saṁhitā* (1st century A.D.; *Siddhisthana*, Ch.XII) and in *Suṣruta-Saṁhitā* (1st century A.D. or sometimes later; *Uttaratantra*, Ch.LXY): two authoritative medical treatises. This list seems to be borrowed by Kautilya from logical texts that did not reach us.

The *Tanktra-Yukti* can be regarded as a direct predecessor of the *Nyāya-Sūtra*; in any case it has been mentioned by Vātsyāyana, commentator of the latter (*Nyāya-Bhāṣya*, 1-1-4). In this list of 32 terms related to the methodology of discussion, the 12th one is 'analogy' (*upamāna*). Its definition, though, is not cited there.

However, in *Charaka-Saṁhitā* (*Sūtrasthana*, *adhya* 1) one can see a list of categories which should be analyzed within a discussion (*vāda-mārga*); among them, a five-member form of logical inference, whose structure contains analogy, is mentioned.

"(9) Demonstration (*sthāpana*) - formulation of proposition (*pratijñā*) within inference, by means of example, its utilization and conclusion, for instance:

(I) Soul is eternal (proposition)
(II) because it is not created (foundation)
(III) like space which being not created is eternal (example);
(IV) soul, like space, is not created (utilization);
(V) therefore, it is eternal (conclusion).

(10) Counter-demonstration `(*pratisthāpanà*) - formulation of a counter-proposition, for instance (counter-assertion):

(I) Soul is not eternal (proposition)

(II) because it can be cognized by senses (foundation)
(III) like a pot which is cognized by senses and not eternal (example);
(IV) soul like a pot is cognized by senses (utilization);
(V) therefore, it is not eternal (conclusion).

* * *

(15) Example (*dṛṣṭānta*) is a thing with respect to which an ordinary person and an expert have the same opinion and which describes a subject, for instance, hot like 'fire', immobile like 'earth', etc., or similar to the connotation of 'Sun' in text of *Saṁkhyā* (namely, a 'lamp')".

Then a first definition of 'similarization' (*aupamya*, lit. 'analogical') follows: (1)

(1) Here this text comes to an abrupt end.

APPENDIX 7

ANALOGY IN *JAINA'S* PHILOSOPHY

(1) The word *hetu* (logical foundation) has been distinctively classified for the first time in the *Sthānanga-Sūtra* (4^{th} century B.C., Ch.6). '*Hetu*' is considered a synonym for a 'source of genuine knowledge' (*pramāṇa*) and is divided into four different categories among which is *upamāna*, i.e., 'knowledge deducted by means of likening to a model'. Here also classification of 'models', or 'examples' (*djñāta*, or 'known') is proposed: (1) *āhāranga*: complete model, i.e., the one identical to a prototype; (2) *āhāranga-tadeṣa* - limited model which has a partial similarity to a prototype; (3) *āhāranga-taddoṣa* - imperfect model; (4) *upanaya-sopanaya* - parable-like model.

(2) Umaṣvati (1-85 years A.D.) distinguishes in the *Tattvaṛthadigama-Sūtra* (Ch.1) two types of trustworthy knowledge: immediate knowledge (*pratyakṣa*) and mediated knowledge (*parokṣa*). Among the varieties of the latter, analogy (*upamāna*) is listed, together with logical deduction, testimony, hypothesis, relativity, and non-beingness. But all these varieties are not considered independent sources of knowledge; some of them are not even considered sources of knowledge at all.

(3) An amplification of status of a model/example (*āṣankā*) is mentioned in the 10-member's syllogism of Bhadrabahu (about 370 A.D.).

Umaṣvati proposed in the *Tattvarthadigama-Sūtra* method of '*naya*', a model analysis of applied examples when they are interpreted from five different positions: (1) '*naigama*', an indifferent or non-analytical position when it is implied that an object of comparison has certain features similar to a model, though comparison between them is not undertaken. For instance, using 'bamboo' as a model, we notice certain features which are specific to bamboo only, but do not exclude those which are common to any other tree; (2) *sāṅgraha*, an 'assembling' position which only takes common features into considerations and ignores the specific ones; (3) *vyavahāra*, a practical position in which, on the contrary, only specific features are noticed, whereas universals are considered to be 'non-existent' (for instance, when someone asks for a mango [with intention of eating it],

he bears only one piece of fruit in mind, not 'mango-ness' as such); (4) *ṛju-bhāva*, an immediate perception of a thing without its past and future, name (*nāma*), model (*sthāpana*), or the reasons for its appearance, without its qualities and relationship with other things (*dravya*). That a shepherd has the name 'Indra' does not make him a King of Gods. Image of God cannot perform functions of God. Reasons for my current actions are important for my future incarnations; they do not, however, become an obstacle in my attempts to master and posses my present body; (5) *śabda*, a method of a 'correct nomenclature' which can be of three varieties: (a) *samprata*, a conventional, not literal utilization of words, as it happens, for instance, to the word *satru* which literally means 'destroyer' but which can be used as 'enemy'; (b) *samabhirūḍha*, the use of a word in a strictly etymological sense by, for example, analyzing of all its derivatives; (c) *evambhūta*, not metaphorical but a literal utilization of a name if a named object really possesses a quality to which its name refers.

(4) Sidhasena Divakara (480-550 A.D.), *Nyāya-Avatāra*.

A similitude as a mistake in a 'smaller term' (*pakṣa-ābhaṣa*) appears when what has to be proved is taken already-proven, or when the already-proven is regarded either as impossible to prove, or as what contradicts perception, logical deduction, common opinion, or as what is incompatible with the intentions and declarations of someone doing the proving.

Analyzing *vyāpti* (relation of invariable accompanying), Siddhasena distinguishes between 'interior *vyāpti*' and 'exterior *vyāpti*. 'Exterior *vyāpti*' (*bahir-vyāpti*) takes place when a sample model is introduced into a structure of deduction 'from outside', as a common place for a medium term (*hetu*) and as a major term (*sādhya*) by which a relation of invariable accompanying between them is ensured; this relation, thus, has a structure of analogy. For instance:

> This mountain is on fire (a major term)
> because it is smoky (a medium term)
> like a stove (an example).

Mentioning a stove is not a significant part of the deduction: it has been introduced 'from outside', as a customary case of fire and smoke which invariably accompany each other (and thus a general invariable-accompanying between them is confirmed).

Some logicians claim that what has to be proved, i.e., a major term (*sādhya*) can be established by means of 'interior *vyāpti*' only and thus 'exterior *vyāpti*' is unnecessary.

A similitude or mistake in a 'medium term' (*hetvābhāsa*) appears as a result of doubt or an erroneous grasping or non-grasping of a 'medium term'.

A mistake in an example (*dṛṣṭāntabhāsa*) appears when a 'medium term', or a 'major term', or both are defective.

(5) Manikya Nandi (about 800 A.D.) in the *Parikṣamukhasūtra* mentions 'recognition' (*pratyabhidjñā*) among indirect sources/means of a genuine knowledge. Recognition is knowledge which springs from perception through remem-

bering in its following forms: "This is that", "This is similar to that", "This differs from that", and "This corresponds to that", etc. For instance, "This is that [the same] Devadatta", "*Gavaya* is similar to a cow", "Buffalo is different from a cow", "This lies further than that", and "This is a tree", etc.

An example (*dṛṣṭānta*): a 'medium term' and a 'big term' are parts of deduction, but an example does not belong to it. Nevertheless, in order to make the essence of deduction clear to less intelligent pupils an example is acceptable, as well as utilization (*upanaya*) and conclusion (*nigamana*).

Mistakes or illusions are knowledge of what is different from a real thing. Manikya Nandi lists 8 varieties of them: (1) perception (*pratyakṣa-abhaṣa*), when, for instance, a pole is taken for a man; (2) remembrance (*śmarana-abhaṣa*), when, for example, someone says "This is Devadatta" when trying to remember Devadatta; (3) recognition (*pratyabhidjñā-abhaṣa*) when, for instance, someone says: "This is a tiger" when spotting a wolf; (4) argumentation; (5) a 'smaller term'; (6) a 'medium term'; (7) example; (8) testimony.

(6) Deva Suri (1086-1169), in *Pramāṇa-naya-tattva-aloka-alankara* reproduces the argumentation of Manikya Nandi in regard to the superficiality of example.

APPENDIX 8

ANALOGY IN BUDDHISM

(1) *Abhidhamma-Pitaka, Kaṭhavatthuppakāraṇa* (about 255 B.C.)

A case of simple comparison (syddhika saṁsandāna):

Theravadin: "Are soul and matter both known as a real thing?"
Puggalavadin: "Yes."
Theravadin: "Is soul one thing and matter another?"
Puggalavadin: "No, this cannot be defended."
Theravadin: "Then [you have to] acknowledge defeat."

If both matter and soul are known as real things it has to be admitted that they are different [things]. You make a mistake when accept the first statement, but not the second one. If the second statement is impossible, the first one is not possible either. It is erroneous to claim that both matter and soul are known as real things and that, at the same time, they do not differ from each other.

A case represented by analogy (opamana saṁsandāna):

Theravadin: "You acknowledge that matter (*rūpa*) is a real thing. Feeling (*vedanā*) is also such a thing. But matter is one thing, and feeling another, isn't it?"
Puhhalavadin: "Yes."
Theravadin: "Is soul known in the same sense as a real thing as matter?"
Puggalavadin: "Yes."
Theravadin: "Then matter would be one thing and soul another?"
Puggalavadin: "No, this cannot be accepted."
Theravadin: "Then [you have to] acknowledge defeat."

If matter and soul are known as real things but, at the same time, are different then, by analogy, they have to be different to the same extent. Your assertion is false if the first pair of statements is accepted and the second one is not. If you cannot accept the second pair of statements, you should not accept the first one. Your situation is false.

(2) *Upāya-Kausalya-Hṛdaya-Śāstra* (about 300 A.D.)

Here analogues, or too distant analogies of 8 varieties, are considered: (1) equation by excess; (2) equation by deficiency; (3) equation by indisputableness; (4) equation by absence of foundation; (5) equation by co-presence; (6) equation by mutual absence; (7) equation by doubt; (8) equation by counter-example.

(3) Dignaga, *Pramāṇa-Samuchhaya* (450-520 A.D.)

The third Chapter revolves around 'deduction for others' (the 5-member's one) counterpoised to' deduction for oneself' (the 2-member's one) which contains an analogical example.

The fourth Chapter is devoted to the analysis of homogeneous and heterogeneous examples.

In the Fifth Chapter the negation of a counterpoised ("a cow is what is not a non-cow") is analyzed. At the same time, analogy, according to Dignaga, is not an independent source of knowledge. He says that when we remember certain things through the perception of a similar thing, we just perform an act of perception. That is why analogy, or recognition of similarity, is not an independent source of knowledge: it is included in perception.

The sixth Chapter contains an analysis of 'analogues' (*jāti*), or too distant analogies, a total of 14 varieties, all of which are mentioned in the *Nyāya-Sūtra*.

In the *Nyāya-Praveṣa*, Dignaga proposes a theory of examples transformed into general forms of *vyāpti*. Dignaga includes example into structure of a 'medium term'. In *Nyāyabindu* Dharmakirti simultaneously objects and underlines the analogical nature of example, its independence from logical deduction and its demonstrative usefulness.

APPENDIX 9

PLATO/ANALOGY

Gorgias - description of 'spiritual harmony' according to a model of 'bodily [corporeal] harmony' (Pythagorean idea of 'figure' as 'form').

Meno - knowledge as remembrance (psychological reduction), '*anamnesis*'.

Cratylus - 'thing-idea-type-name': from idea to utilization [of this idea].

Analogy of name: nomothetic in striving to reach a model (compare the 1,000 names of *Visnu*), synonymicity.

Problem of the 'conventionality of names' (compare Thomas Aquinas) and the non-congnizability of sense, *or* 'adequacy of names' under a condition of recognition of their instability (Heraclitus-Cratylus-Duns Scotus).

Name has to be given according to its purpose, 'dialectics of names' – dialectics of purposes.

'Telling name' - a model of quality.

On onomatopoeia: imitation leads to a clarification of knowledge. 'Imitation in/by name' is not absolute reproduction of an object, but a resemblance of a certain aspect. 'Role sounds': reality, things speak about itself . . . Primordiality:

essence idea of a cup === a full name Power of analogy of name

S	S	Bi-orientation	
cup	name	Ambivalence	
		collation	recognition
	speech	'syncretic'	'diacritic'
	activity	'synthesis'	'analysis'

particular point of view on entity

'interpreting imitation' a signifying act of naming; communicative function.

Interesting: Plato regards *name* to be a unit of speech, but interprets its use by means of *action* (vice versa for *Mīmāṃsākas*), *use*, etc., reflection and signification.

'Spontaneous phenomenology': (a) reduction to primordiality of sense;
(b) analogous transference of meaning, by means of fixed phonation (etymological transference, mainly according to the properties of action).

Phaedo - 'model of soul' - according to familiar examples (remembrance of the world, structure, contradistinctions. Perception is eternal).

Phaedrus - generating model: different degrees of perfection (=similarity). Soul as a chariot. Trinity of soul.

Theatetus What is knowledge? Organicalness, ideality.

Sophists Dichotomy polarity (diaresyses)
Analogy in a principle of spread-ness.
Transference: 'truthfulness' into 'ontology'
epistemological active

Parmenides 'the same' 'different'
Partial reflection and movement
Ideas (Hegel): generating model

Thing — idea: partial similarity, revealing, modeling (dialectical generation);
Aristotle: a formal principle of *contradiction*, incompatible with analogy.

Philebus 'syncrisis' 'diacrisis'
mixing (analogy) and untangling
contradiction: pleasure —— reason

Republic
'Types of states' 'Types of personalities' (analogy by similarity)
Three parts of soul – three estates – three types of state – three types of pleasure
Justice – 'dismantling of analogies'
Image of a 'worldly spindle' (*anankē*)

Timaeus Pan[complete]-analogy. Cosmos - animal, composition of mind, soul, body; greed, color, and other regularities.

Politicus Cosmology and the state's stability
diairesisis
The 7th Epistle Three levels [steps] of cognition, knowledge, and being:

being
knowledge N
depicting I
definition V
name I

elevation in diairesisis to understanding (I)N
In *Mīmāṃsā* - [elevation] from being=action to knowledge=depicting, definition, and name.

APPENDIX 10

PTOLEMY/ANALOGY

Harmony as a system property
'Harmonic' analogy

(1) harmony as a specific theory of music	analogy
(2) harmony as a method of organization of scientific knowledge	from particular to general

(1) harmony as a system of an organized *language* of science	<syntagmatic>
(2) harmony as a system of *activity*	<paradigmatic>
(3) harmony as a foundation of *typology* (used in place of categories)	<pragmatic>

Impression from music and its *organization* (pitch).

Stop, fret; concord tune; timbre

Criterion of harmony: pitch and logos, reason.

Aesthetics directly determines accidental similarity

Logic directly reveals authenticity

nature

feeling

types of organization

APPENDIX 11

ON *KAṬHA-UPANIṢAD*

In *Kaṭha(1)-Upaniṣad* Śaṇkarā describes a meaning of the word *upaniṣad* [as follows]: The root *ṣad* means 'to dismiss', 'to destroy', 'to acquire' ['to pass time']. *Upaniṣad* signifies Knowledge of Essence, because it disperses non-knowledge [ignorance], destroys doubt, and acquires [passes time]. Literally, however, this word means "to approach and prostrate oneself before a teacher". Therefore, the descriptive appearance of the word hides its inner knowing [knowledgeable] sense. Such a text is defined as a 'metaphorical function', [in the same way, like an equation "Baked milk is life" where a functional relation between two substances is declared. (This is so because any text is functional with regard to knowledge). The literal sense of the word is lost, whereas its knowledgeable content, different from both an action of grasping [understanding] a sense and the relation 'teacher-pupil', is preserved. *Kaṭha-Upaniṣad* is on *how* knowledge *appears* (*kaṭham* - 'In what manner?').

Brahman Vadjaṣravasa performed a sacrifice *Viśvādhit* ('All-conquering'). According to rules of this sacrifice, only the person who sacrificed all his possessions (who gave them away to other people) deserves a reward. His son Nakichetas watched. While observing his father's distribution of gifts, Nakichetas believed in the *selfless* exchange embodied in the rules of this sacrifice, i.e., sacrifice without an ordinance (unlike it was the case in exchange between Abraham and God in the *Bible*). He *noticed,* however, that his father was cheating by giving away old cows, [who were] unable to eat, drink, and procreate. Nakichetas was saddened and said to himself [about his father]: "The world must be really joyless for him because the recipients of the sacrifice will not benefit from having these cows". A false exchange could not lead to a real result. The boy understood that his father would be condemned to suffering and decided to save him. An exemplary son, he did not want his father to suffer the consequences of a useless sacrifice. He was a witness of the untruth and decided to correct his father. Nakichetas' intention, however, was to make his father to choose a right action himself.

He started to pester his father who was busy with the distribution of gifts [by asking]: “And to whom would you give me away?” He asked this question several times and finally his irritated father answered: “I would give you to death!”

This comment was made during the ceremony of giving away property, and everybody heard it. A son is considered to be a property of the father. This meant that the father of Nakichetas was obliged to follow up on his words. Belief, if it is genuine, confronts negation and doubt. Nakichetas, a deep believer, insisted on keeping his father’s word. His belief was stronger than his fear of death. That his father had made his comment in anger means nothing since it was made not casually, but ceremonially and thus must be kept. Nakichetas was perfectly aware of the blunder his father made but did not want him to step back. That is why he asks the question about a *goal of a shout*: “What goal can you persuade, father, by giving me away to God of Death?” That is, he imparts the sacrificial sense to his father’s blunder, *expediency*. And *through* an expediency of this act he sees a *natural* law: “Look what happened to those lived before us; what will happen to those around us? A mortal matures [grows] as an ear, and is born again, as an ear.” Death is the law that apparently knows no exceptions. Exceptions neither exist for saints or liars. [If so,] then this is certainly a sin to be cheating in front of death. One should act according to the rules: according to a nature of death, without cheating. After considering this pattern of regularity in nature, Nakichetas ascends it into *ethical* law. If it is true that people are born and then die, like ears, why be cunning? Here [someone] does not have to obtain consolation, but observe the *organization* of the mind according to its natural pattern.

Vadjaṣvara therefore sent his son to Yama, the God of Death, in order to keep his word. Yama was not present when Nakichetas arrived. For three days the boy did not touch a food of the dead. When Yama returned, he gave Nakichetas a warm welcome. The God of Death was also the God of Justice and Order. When he learned that his guest had stayed in his house three days without any food, he immediately proposed compensation: a choice of three gifts. Yama’s absence was certainly not negligence as was the case with [Nakichetas’] father, but a law is still a law: ignorance does not free anyone from their responsibilities. An ethical obligation has more weight than natural circumstances since they are only taken as a pattern and we do not know if they are really patterns. But because our mind considers them patterns, they ‘really’ are. [This is] because what is grasped by our mind is entirely speculative, thinkable. Thus, an ethical obligation surpasses a natural pattern.

Nakichetas starts by asking Yama about *proper*: he wants his father be calm, freed from anger at him, and ready to welcome his son with joy when he returns.

His father had a reason to be angry with Nakichetas: he tricked him during a sacrifice. Only a return from the dead, i.e., supernatural turn, could eliminate this anger. Precisely because of this, Yama *had to* let Nakichetas go.

Nakichetas asked Yama to teach him a sacrifice with which someone could attain the highest good: immortality in the world of *Brahmā*, where old age,

hunger, illnesses, and death do not exist. Yama taught him the Fire Sacrifice, which led to the sky. Here again [is] a speculation. Fire is all consuming, i.e., it takes everything that is given to it (the same as in the first sacrifice of [Nakichetas'] father, i.e., in a sacrifice of giving away). This is why it resembles the Universality of all material things in the world. This Fire, *Virāj*, is the Body of the Universal Self. An embodiment of itself is [undertaken] into the heart. That is why mind in heart is *Virāj*, Embodied Self-Consciousness, mediated by an all-consuming fire. Such is the sense of sacrifice. The world presents itself to self-consciousness through qualities, images, processes, and relations. Everything presented to self-consciousness, mediated as its *Own*, is consumed by a 'Cordial Fire'. The world is internally familiarized by heart: everything external, corporeal goes there and disappears there. What is external and mediating here are an altar and a fire on an altar. In the same way that fire consumes everything material [which is sacrificed], heart accepts and consumes everything thinkable [which is being thought]. In this double mediation, *time* acquires a spatial life-organization: the altar is compiled of 720 bricks (the number of days and nights of our life). Furthermore, a scheme (of the deployment of 'self') is proposed:

SELF: {1} The first quality: to be inherent (*saguṇa*); {2} the composition of inherentness in modes of creation (stay), destruction, i.e., appropriation, acquirement, loss of itself; {3} the reflection of presentness: Possessor (*Iśvara*), deployed in aspects and functions: Golden Fetus (personhood), *Brahmā* (objectivity), *Sūtra-Śama* (connection-through-itself), subjectivation of things, passed, as on garland, through 'themselves'; {4} revealed [outside] as Fire-Life-Cosmos: for Itself. Thus the entire world, taken in space and time, is framed by subjectivity (self - from itself - by itself - out of itself - in itself - for itself). A subject is a Possessor of the world. Any scarifying person passes through self-consciousness, step by step, to achieve the world of *Brahmā*, to identify his Self as *Brahmā* (object). A measure of advancing here is the measure of activity of [mental] realization.

The third gift remains. The first two exhausted everything proper, corresponding. This scheme, as a colorful chain, embraces the whole world of *action*, symbolized by the sacrifice of Nakichetas, by the Fire of *Virāj* (radiation). The third gift, therefore, is *free*: even immortality has been overcome here and all necessities are eliminated. The first two gifts are connected to the *Vedic* 'chapter of action' (*Karma-kaṇḍa*). The third gift is linked to *'knowledge'* (*Jñāna-kaṇḍa*), which is behind *Mantras* and *Brahmans* in the *Upaniṣads*. Proper and prescribed is overcome in this knowledge - is eliminated in it - because *without* them [proper and prescribed] it would not be *freedom*, no third gift. *Jñāna-kaṇḍa*, therefore, is a *generated* philosophy, an absolute knowledge. All fruits of action, linked to patterns and myths, are also eliminated there. [Anybody] enjoying the fruits of acts wallows in a stream of life. He links himself to its levels and processes. Ignorance about himself is destroyed by knowledge; by a departure from the world of appearances; by Self-realization - which is better than immortality and world.

Nakichetas asks: does man *exist* after death or not? That is, a gift he would like to receive is not a personal material immortality, but *knowledge* of posthumous existence, [knowledge as available] before death? This *question* defines the essence of Self-realization as different from body, senses, mind, intellect, [which are] transient and transferred from body to body. A *legality of the very question* is, furthermore, quite evident: if knowledge of Self-realization is possible, then this knowledge can certainly be achieved not through perception, not by way of deduction, but only by a knowing teacher and his words. Self-realization is therefore speculation of a process of cognition [reflection, received] from a teacher, [reflection] as such, pure reflection.

First two gifts are for an individual who is busy constructing the world and duty: someone whom Nakichetas was before, without teacher. These gifts, as well as their fruits, are located in a sphere of individuality.

Knowledge, on the contrary, is in the so-called 'dividuality' of teaching of Self-realization, of non-individual, of non-immediate. That is why knowledge of Self-realization demands an abstraction from material wishes, objects and everything individually realized. Moreover, it is why anybody who craves for such knowledge has to be *tested*. Yama puts Nakichetas's determination to the test on four points: does he distinguish between eternal and non-eternal? Does he prefer eternal? Can he, according to his qualities, be a possessor and a transmitter of knowledge? (Can he live with this knowledge?) Does he really desire freedom?

Yama says: "Self-realization is beyond even Gods' power. Choose another gift: this one is hard to bear".

Nakichetas is stubborn: "Let Gods doubt, but understanding is difficult. However, another teacher, similar to you, is impossible to find. The same as gift, similar to this one. Because Yama means justice, self-possession, destiny. Therefore, everything else, which is presented, is in his possession. To distinguish between the eternal and non-eternal is in his power".

Yama offers all worldly and heavenly goods (eternal life, bliss, and power over the whole world - all of which is comparable to the temptations of Jesus), simply to prevent Nakichetas from raising *this* question.

But Nakichetas prefers the eternal to the non-eternal. Even immortality is not eternity because it is not more than the absence of death (and, as such, presupposes that death is included in its content). Cognizing from God, we consequently reject everything unworthy as unequal, he says. Therefore, only this cognition can be a gift, which eliminates doubts. Only this gift, shrouded in mystery, is a real gift.

YAMA TEACHES:

First of all, one should realize that *good* is one thing, and *pleasant* - another. This distinction does not mean, however, that an individual has to grasp them in division. A divided search (*viveka*) leads to the understanding that both of these, even if they serve *different* goals, [have the same effect: they] bind him. A simple

distinction between good and pleasant is impossible to make. The good has to be seen [found] in the pleasant. This is a real distinction. Nevertheless, there are still no things that should be distinguished. The mind has to be tuned to realize the good within the pleasant. The one who then chooses the good, furthermore, acquires a Superior Good. The [one] who simply prefers the pleasant is mistaken. This choice is always the choice of an individual. The majority, however, simply prefers the pleasant. [This is] because the source of the pleasant is in the senses and in ordinary thinking, which we are accustomed to trust. Common sense and reliance on sensual experience confuse distinction. [. . .]

Both good and pleasant present itself to the individual. He investigates their images in a calm mirror of consciousness and *distinguishes*. That is, the individual prefers the good to the pleasant. A distinction here is also connected to the extraction of essence, clarifies Śaṇkarā: like an ant extracts grains of sugar from a mix of sugar and sand.

From the conversation with Nakichetas, Yama realizes that he is able to distinguish and *ignore* the non-essential. Possessing such qualities he can hold philosophical knowledge: he does not wallow in the subjective and the apparent. Why? Because he only really wants knowledge, different in its essence from a transient experience, as light from darkness, as captivity from freedom. Ignorant persons remain in the dark, tempted by darkness of wishes and wordily things. They regard themselves as knowledgeable, though, they are caught at the crossroads of illnesses, old age, and death. They do not know what will come after. Because of their experience they think: "There is nothing after this". They cannot think in dividuality, as an individual, they are lost in darkness and cannot see. Many [of them] do not want to listen about 'themselves', and even while listening [they] do not understand. Far apart one can meet [somebody who] cognized himself, someone whom a teacher -aware of essence has taught.

Far apart is the appearance of a man [birth as a man]. Rare among people are those thirsty for freedom. A rarity is to meet someone who is able to teach.

Self cannot be cognized within discussion, because disputants are different in their opinions; there is no teaching or knowledge in this, only opinions. Furthermore, everybody is left with his doubts. Self, however, can neither be divided, nor doubted. Knowledge is a unity of self; there is nothing other, different, separated from self-identity. Such knowledge cannot be achieved through any reflection - only through teaching. It is not sufficient, furthermore, just to have an appropriate teacher; a pupil has to be a real investigator: a pupil beyond name and role.

It is curious that in this sense a pupil surpasses a teacher. Yama is God, and this is testified by his position. Therefore, he acquired divinity by the very sacrifice he taught Nakichetas; *named* it and, therefore, he enclosed himself in the world of things. That is why, in regard to Nakichetas, Yama is not a *source* of knowledge about freedom. Nakichetas acquires this knowledge by himself, with the help of a teacher. Nakichetas is a man, the only one able [to acquire] this knowledge. The pupil is superior to the teacher because the pupil gains

knowledge (*upaniṣad* reflects this process of acquisition). In fact, Nakichetas has to reject and practically rejects the reality of Yama. Offering everything different, Yama offered himself to Nakichetas, as his essence. But Nakichetas needs neither the kingdom of Yama, nor his essence; just knowledge. An acquisition of knowledge is therefore never just a reproduction of tradition. Nakichetas rejected available content [of knowledge] precisely because it is relative; [transferred] from a teacher to him, but not 'his'. Knowledge is absolute, and that is why it has to be placed within a context of giving, transmission, and tradition. The pupil realizes knowledge as being different not only from things in the world of nature, but from an activity of teaching: a transmission of knowledge. He distinguishes it from social norms, as well as from natural things, and thus he studies it as a subtle self-essence.

Nakichetas insists: "Tell me what you see as different from right and wrong, different from cause and effect; different from past and future."

Yama cannot tell Nakichetas 'himself': because this will be perceived by Nakichetas as 'different'. In addition, the essence of Yama is what Nakichetas already surpasses: that is also why he would perceive this as 'past'. Because of that Yama offers Nakichetas something 'different' from which he would grasp as knowledge of 'himself'. That is, he describes a *symbol* of Self-being: *AUM*. He claims it to be the goal of all *Vedas*, of any striving, of all human wishes: *AUM*. This word means *upaniṣads*; *vedānta* - the goal of *Vedas. Upaniṣads*, the word of knowledge, is 'logos', different from everything 'else'. Name, logos is internal, world is external, appearance (*rūpa*). *Sphoṭa*, the sense of *Vedānta* - that is what is sent by the teacher, and received by the pupil. *Sphoṭa* – sense - is what mediates *nāma* ('name') and *rūpa* ('meaningful form').

Commentary by Śaṇkarā: "A unity of name and meaningful form (*nāmarūpa*) is condition of world-revelation, as realized by a subject. A meaningful form is an external crust, whereas a core, an essence is a name, a signifying. However, a name is inseparable from word and sound, even they are not the same. Hence signifying is related to meaning, not to sound, as to its form. Thus, a genuine form of name, its sound, or word, is different from its 'material meaning', a signified. Therefore, signified is neither word, nor sound, but world perceived by senses. This world shields a sense of word, i.e., a correlation between signifying and its genuine materialness, sound. This sense is *sphoṭa*, i.e., 'logos', 'body of word'. An eternal *sphoṭa* is essential, without beginning, a material of all thoughts and all naming. This is the very activity of world-creation. Initially, even God, before he starts to create a world, is determined by *sphoṭa*: a sense of 'divinity'. Therefore, sense is hidden by the world - even for God - although it is he who creates the world by means of the power of his *māyā*. God strives to introduce order and concreteness into the world; to make it sensually perceptible. Erroneously enough, however, this makes the hiddenness caused by things even more escalatory. One has to turn away from the world and realize sense; has to look at its 'other' - i.e., at a symbol of sense: *AUM*. Since this word is physically inseparable from sense, *AUM* and *sphoṭa* cannot be divided. An eternal

AUM is a source of all names and signifying forms ('internal' form of speech). Its uniqueness is precisely here. *Sphoṭa* is a matter or a foundation of all sounds in all words and all wordy sounds, inseparable from names and representations. But *sphoṭa* is not a definite, formed word. That is why, if we remove all distinctive qualities, all sense-distinctions of all possible [thinkable] words, only *sphoṭa* remains, i.e., symbol *AUM*. This is why *AUM* is called *Nadi-Brahman*; 'beingness of sound'. The three letters in its composition are regarded to be a generalized symbol of all possible articulated sounds. A – a root sound, pronounced without any differentiation. [. . .] [2] Taken together A, U, and M create a logical foundation of any pronunciation with a sense-distinction, a minimal sense matrix, the shortest possible alphabet of phonemes. This is why *AUM* is a symbol of sense, an initial 'word'. A(lpha) and OM(ega). The whole alphabet is deployed between them. Therefore, here we have a sound correlate of the world in its embryo and in its totality, a notion of world-revelation as a *known* [something], as a symbol of God, both as personal (in his Three Assemblies of Creator, Sovereign, and Destructor), as non-personal beingness of 'speaking'. Everything articulated is in it. A closing M [means] a merging of meaningfulness in sound, in a non-personal reality. With this sound, a word leaves the lips, becomes transcendental and non-personal: anonymous. *AUM* is eternal; it is not an invention (because any invention is already in it). It is revealing because its vivid fabric is within the teaching of knowledge, within what is happening between teacher and pupil.

A categorical scheme here is relatively strict. [. . .] Here a matter of speech symbolizes an activity for transferring knowledge. Knowledge, therefore, is a growing notion (*Brahman* means 'growing'). [. . .] *AUM* presents itself as a 'symbolic cell' that generates any speaking in the world and about the world. An activity of *distinction* is brought out of a subject and embodied in a matter of speaking, which is defined as sense. Within this [move], a subject acquires the freedom of self-beingness, of active thinking about everything based on *AUM*. Thus he can achieve a Transcendental Freedom, or a World of *Brahman,* since his intention is correctly fixed in words from now on. Therefore, a word here means a 'qualifying' *Brahman*, if the world is intentionalized, and a 'non-qualifying' *Brahman*, if what is intentionalized, is freedom. In any case, *AUM* is the foundation for a pure consciousness, freed from a situation 'teacher-pupil'. The purpose of the *AUM* symbol is to transcend situations and things. In particular, relying on *AUM*, thinking exfoliates from itself ideas about birth, death, causality, changes, and relations, etc. Nakichetas thus receives the only true answer to his question about the existence after death: since that state is not any from mental conditions, it is not conjugated to any verbal descriptions. This does not mean, however, that it is not real: to describe a 'self' one has to eliminate all descriptions of a 'non-self':

"The one who knows himself is not born. [He] does not die. [He] does not show himself, and nothing emerges from him. Non-born, eternal, non-transient, and ancient, he does not perish with the death of his body."

All these definitions are meta-linguistic definitions related to a pure consciousness, based on the symbol *AUM*. As for the world, it is entirely removed within a notion for the self-realization of [someone who] cognized the world. Through cognizing the world in/by idea which surpasses transient bodies, a subject transcends corporeality, spatiality, temporality, and care.

Turning to the content of the world, one realizes that a self cannot be cognized simply by reading the *Vedas*, by individual reasoning and by listening to lectures. Only that [one] knows himself who is chosen for himself and by himself. Truth presupposes the efforts to comprehend it: knowledge is not a 'spontaneous striking from above'. Enforced by his efforts, he does not disappear without a trace because his real force is increased by his efforts.

A structure developed by a transmission of knowledge from teacher to pupil is preserved by a trained individual as a peculiar 'dividuality', which does not have an ontological, but a historical content, and reflects the composition of his soul within the process of learning.

"Two reside in [one] body, in consciousness, in radiation of heart, in enjoyment with rewards of deeds. Those who know *Brahman* describe them [these two] as light and darkness: as duty and freedom."

Individuality and above-individuality co-exist within a person who knows and thus possesses knowledge of *Brahman*. That is why one who knows has to act in order to preserve inseparability of the world of qualities and the world of freedom. If the first parameter prevails, an actor is thrown into a stream of existence; the second parameter, however, remains intelligent only with respect to the first one as realization of its necessity. This is clarified by a known myth about the 'rational' and 'natural' parts of a soul. 'Rationality' characterizes an educated personality that embraced freedom. 'Naturalness' is the chariot that transmits knowledge from one body to another.

"[You have] to know that self-consciousness is a possessor of a chariot, body is a chariot, consciousness is a driver, mind is rein, senses are horses, and objects of senses are roads."

Thus, anthropomorphism is a symbol of the activity of learning and cognition, of transmitting truth and freedom from one body to another. It is a duty as well, a duty of keeping the body in good shape for the purpose of transmitting it to the next subject. In order to realize this, an individual ought to be active, and ought to move. A goal of this movement is a totality (*vasu*: 'everything') of transcending.

EDITORIAL NOTES

(1) Elsewhere in his texts Zilberman describes *kaṭha* as "a *socialized speech activity*, or *conversation* [. . .] *Kaṭha* means a 'conversation *with* somebody', not mere 'talking'. The verb *kath* translates as 'to inform', 'narrate', 'address somebody', 'refer to somebody', and implies the 'recipient-directed speech'. [. . .] *Kaṭha* is defined more precisely as a 'polemical conversation' [. . .] *Kaṭha* is not a *dialogue* in the Platonic sense, i.e., something objectively staged and separate in genre. It is conceivable

only as a component, a part of a dialogue, like a thread in its fabric woven by one of its parties. Compare the *Nyāya-Sūtra*, 1.2.1.: "*Kaṭha* is an adoption of a side by a disputant and its opposite by his opponent" with what Hegel called an 'essence of dialectics' in part Two of his *Science of Logic* (Section, 'On the Porosity of Matter'). (Zilberman, D. 'Dialectics in Kant and the *Nyāya-Sūtra*, in *The Birth of Meaning in Hindu Thought*, p.175.)

(2) A brief analysis of letters and sounds A, M, U which follows this reasoning is skipped by the editors because it is undertaken by Zilberman with regard to a Russian alphabet and has no direct projection within an English one. However, a conclusion, which goes further, is reproduced in Zilberman's text; this conclusion seems to work in English too.

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